



**SURVIVABILITY - SUSTAINABILITY - MOBILITY
SCIENCE AND TECHNOLOGY
SOLDIER SYSTEM INTEGRATION**



**TECHNICAL REPORT
NATICK/TR-96/024**

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DISMOUNTED INFANTRY MOVEMENT RATE STUDY

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Table of Contents

List of Figures	v
List of Tables	vii
Preface	xv
1 Introduction	1
2 Approach	1
2.1 Range of Conditions Considered	1
2.2 Maximum Sustainable Metabolic Rates	2
2.3 Maximum Sustainable Speed	2
3 Results	3
3.1 Step 1, Maximum Sustainable Metabolic Rates	3
3.2 Step 2, Maximum Sustainable Speeds	4
4 Limitations	5
4.1 Performance Degradation as a Function of Time	5
4.2 Single Load and Uniform Configuration	5
4.3 Temperature Extremes	5
4.4 Single Constant Wind Velocity	5
4.5 Sustained Movement versus Move then Rest	5
4.6 Workloads on Steep Terrain Grades	6
List of References	7
Appendixes	9
Appendix A TRADOC Request Letter	11
Appendix B Maximum Sustainable Metabolic Rate Figures	13
Appendix C Maximum Sustainable Speed Figures	17
Appendix D Maximum Sustainable Speed Tables, Clear Sky	35
Appendix E Maximum Sustainable Speed Tables, Cloudy	71
Appendix F Maximum Sustainable Speed Tables, Night	107
Appendix G Maximum Sustainable Speed Tables, Partly Cloudy	143
Distribution List	179

List of Figures

Figure B-1.	Maximum Sustainable Metabolic Rate, Clear Sky, 25% Relative Humidity.	14
Figure B-2.	Maximum Sustainable Metabolic Rate, Clear Sky, 50% Relative Humidity.	14
Figure B-3.	Maximum Sustainable Metabolic Rate, Clear Sky, 75% Relative Humidity.	15
Figure B-4.	Maximum Sustainable Metabolic Rate, Night, 25% Relative Humidity.	15
Figure B-5.	Maximum Sustainable Metabolic Rate, Night, 50% Relative Humidity.	16
Figure B-6.	Maximum Sustainable Metabolic Rate, Night, 75% Relative Humidity.	16
Figure C-1.	Maximum Sustainable Speed By Temperature Given Risk, Black Top, 0% Grade, Clear Sky, 50% Relative Humidity.....	18
Figure C-2.	Maximum Sustainable Speed By Temperature Given Risk, Black Top, 10% Grade, Clear Sky, 50% Relative Humidity.....	18
Figure C-3.	Maximum Sustainable Speed By Temperature Given Risk, Black Top, 20% Grade, Clear Sky, 50% Relative Humidity.....	19
Figure C-4.	Maximum Sustainable Speed By Temperature Given Risk, Black Top, 0% Grade, Clear Sky, 75% Relative Humidity.....	19
Figure C-5.	Maximum Sustainable Speed By Temperature Given Relative Humidity, Black Top, 0% Grade, Night.	20
Figure C-6.	Maximum Sustainable Speed By Temperature Given Relative Humidity, Black Top, 0% Grade, Clear Sky.	20
Figure C-7.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Night, 25% Relative Humidity.....	21
Figure C-8.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Night, 50% Relative Humidity.....	21
Figure C-9.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Night, 75% Relative Humidity.....	22
Figure C-10.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Clear Sky, 25% Relative Humidity.	22
Figure C-11.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Clear Sky, 50% Relative Humidity.	23
Figure C-12.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Clear Sky, 75% Relative Humidity.	23
Figure C-13.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Night, 25% Relative Humidity.....	24
Figure C-14.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Night, 50% Relative Humidity.....	24
Figure C-15.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Night, 75% Relative Humidity.....	25

List of Figures (cont'd)

Figure C-16.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Clear Sky, 25% Relative Humidity.	25
Figure C-17	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Clear Sky, 50% Relative Humidity.	26
Figure C-18.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Clear Sky, 75% Relative Humidity.	26
Figure C-19.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Night, 25% Relative Humidity.	27
Figure C-20.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Night, 50% Relative Humidity.	27
Figure C-21.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Night, 75% Relative Humidity.	28
Figure C-22.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Clear Sky, 25% Relative Humidity.	28
Figure C-23.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Clear Sky, 50% Relative Humidity.	29
Figure C-24.	Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Clear Sky, 75% Relative Humidity.	29
Figure C-25.	Maximum Sustainable Speed By Terrain Grade Given Type, 10 °C, 50% Relative Humidity, Night.	30
Figure C-26.	Maximum Sustainable Speed By Terrain Grade Given Type, 15 °C, 50% Relative Humidity, Night.	30
Figure C-27.	Maximum Sustainable Speed By Terrain Grade Given Type, 20 °C, 50% Relative Humidity, Night.	31
Figure C-28.	Maximum Sustainable Speed By Terrain Grade Given Type, 25 °C, 50% Relative Humidity, Night.	31
Figure C-29.	Maximum Sustainable Speed By Terrain Grade Given Type, 30 °C, 50% Relative Humidity, Night.	32
Figure C-30.	Maximum Sustainable Speed By Terrain Grade Given Type, 10 °C, 50% Relative Humidity, Clear Sky.	32
Figure C-31.	Maximum Sustainable Speed By Terrain Grade Given Type, 15 °C, 50% Relative Humidity, Clear Sky.	33
Figure C-32.	Maximum Sustainable Speed By Terrain Grade Given Type, 20 °C, 50% Relative Humidity, Clear Sky.	33
Figure C-33.	Maximum Sustainable Speed By Terrain Grade Given Type, 25 °C, 0% Relative Humidity, Clear Sky.	34
Figure C-34.	Maximum Sustainable Speed By Terrain Grade Given Type, 30 °C, 50% Relative Humidity, Clear Sky.	34

List of Tables

Table D-1.	Maximum Sustainable Speed, Clear Sky, 5% Relative Humidity, 5°C (41°F).....	36
Table D-2.	Maximum Sustainable Speed, Clear Sky, 5% Relative Humidity, 10°C (50°F).....	37
Table D-3.	Maximum Sustainable Speed, Clear Sky, 5% Relative Humidity, 15°C (59°F).....	38
Table D-4.	Maximum Sustainable Speed, Clear Sky, 5% Relative Humidity, 20°C (68°F).....	39
Table D-5.	Maximum Sustainable Speed, Clear Sky, 5% Relative Humidity, 25°C (77°F).....	40
Table D-6.	Maximum Sustainable Speed, Clear Sky, 5% Relative Humidity, 30°C (86°F).....	41
Table D-7.	Maximum Sustainable Speed, Clear Sky, 5% Relative Humidity, 35°C (95°F).....	42
Table D-8.	Maximum Sustainable Speed, Clear Sky, 25% Relative Humidity, 5°C (41°F).....	43
Table D-9.	Maximum Sustainable Speed, Clear Sky, 25% Relative Humidity, 10°C (50°F).....	44
Table D-10.	Maximum Sustainable Speed, Clear Sky, 25% Relative Humidity, 15°C (59°F).....	45
Table D-11.	Maximum Sustainable Speed, Clear Sky, 25% Relative Humidity, 20°C (68°F).....	46
Table D-12.	Maximum Sustainable Speed, Clear Sky, 25% Relative Humidity, 25°C (77°F).....	47
Table D-13.	Maximum Sustainable Speed, Clear Sky, 25% Relative Humidity, 30°C (86°F).....	48
Table D-14.	Maximum Sustainable Speed, Clear Sky, 25% Relative Humidity, 35°C (95°F).....	49
Table D-15.	Maximum Sustainable Speed, Clear Sky, 50% Relative Humidity, 5°C (41°F).....	50
Table D-16.	Maximum Sustainable Speed, Clear Sky, 50% Relative Humidity, 10°C (50°F).....	51
Table D-17.	Maximum Sustainable Speed, Clear Sky, 50% Relative Humidity, 15°C (59°F).....	52
Table D-18.	Maximum Sustainable Speed, Clear Sky, 50% Relative Humidity, 20°C (68°F).....	53
Table D-19.	Maximum Sustainable Speed, Clear Sky, 50% Relative Humidity, 25°C (77°F).....	54
Table D-20.	Maximum Sustainable Speed, Clear Sky, 50% Relative Humidity, 30°C (86°F).....	55

List of Tables (cont'd)

Table D-21.	Maximum Sustainable Speed, Clear Sky, 50% Relative Humidity, 35°C (95°F).....	56
Table D-22.	Maximum Sustainable Speed, Clear Sky, 75% Relative Humidity, 5°C (41°F).....	57
Table D-23.	Maximum Sustainable Speed, Clear Sky, 75% Relative Humidity, 10°C (50°F).....	58
Table D-24.	Maximum Sustainable Speed, Clear Sky, 75% Relative Humidity, 15°C (59°F).....	59
Table D-25.	Maximum Sustainable Speed, Clear Sky, 75% Relative Humidity, 20°C (68°F).....	60
Table D-26.	Maximum Sustainable Speed, Clear Sky, 75% Relative Humidity, 25°C (77°F).....	61
Table D-27.	Maximum Sustainable Speed, Clear Sky, 75% Relative Humidity, 30°C (86°F).....	62
Table D-28.	Maximum Sustainable Speed, Clear Sky, 75% Relative Humidity, 35°C (95°F).....	63
Table D-29.	Maximum Sustainable Speed, Clear Sky, 95% Relative Humidity, 5°C (41°F).....	64
Table D-30.	Maximum Sustainable Speed, Clear Sky, 95% Relative Humidity, 10°C (50°F).....	65
Table D-31.	Maximum Sustainable Speed, Clear Sky, 95% Relative Humidity, 15°C (59°F).....	66
Table D-32.	Maximum Sustainable Speed, Clear Sky, 95% Relative Humidity, 20°C (68°F).....	67
Table D-33.	Maximum Sustainable Speed, Clear Sky, 95% Relative Humidity, 25°C (77°F).....	68
Table D-34.	Maximum Sustainable Speed, Clear Sky, 95% Relative Humidity, 30°C (86°F).....	69
Table D-35.	Maximum Sustainable Speed, Clear Sky, 95% Relative Humidity, 35°C (95°F).....	70
Table E-1.	Maximum Sustainable Speed, Cloudy, 5% Relative Humidity, 5°C (41°F).....	72
Table E-2.	Maximum Sustainable Speed, Cloudy, 5% Relative Humidity, 10°C (50°F).....	73
Table E-3.	Maximum Sustainable Speed, Cloudy, 5% Relative Humidity, 15°C (59°F).....	74
Table E-4.	Maximum Sustainable Speed, Cloudy, 5% Relative Humidity, 20°C (68°F).....	75
Table E-5.	Maximum Sustainable Speed, Cloudy, 5% Relative Humidity, 25°C (77°F).....	76

List of Tables (cont'd)

Table E-6.	Maximum Sustainable Speed, Cloudy, 5% Relative Humidity, 30°C (86°F).....	77
Table E-7.	Maximum Sustainable Speed, Cloudy, 5% Relative Humidity, 35°C (95°F).....	78
Table E-8.	Maximum Sustainable Speed, Cloudy, 25% Relative Humidity, 5°C (41°F).....	79
Table E-9.	Maximum Sustainable Speed, Cloudy, 25% Relative Humidity, 10°C (50°F).....	80
Table E-10.	Maximum Sustainable Speed, Cloudy, 25% Relative Humidity, 15°C (59°F).....	81
Table E-11.	Maximum Sustainable Speed, Cloudy, 25% Relative Humidity, 20°C (68°F).....	82
Table E-12.	Maximum Sustainable Speed, Cloudy, 25% Relative Humidity, 25°C (77°F).....	83
Table E-13.	Maximum Sustainable Speed, Cloudy, 25% Relative Humidity, 30°C (86°F).....	84
Table E-14.	Maximum Sustainable Speed, Cloudy, 25% Relative Humidity, 35°C (91°F).....	85
Table E-15.	Maximum Sustainable Speed, Cloudy, 50% Relative Humidity, 5°C (41°F).....	86
Table E-16.	Maximum Sustainable Speed, Cloudy, 50% Relative Humidity, 10°C (50°F).....	87
Table E-17.	Maximum Sustainable Speed, Cloudy, 50% Relative Humidity, 15°C (59°F).....	88
Table E-18.	Maximum Sustainable Speed, Cloudy, 50% Relative Humidity, 20°C (68°F).....	89
Table E-19.	Maximum Sustainable Speed, Cloudy, 50% Relative Humidity, 25°C (77°F).....	90
Table E-20.	Maximum Sustainable Speed, Cloudy, 50% Relative Humidity, 30°C (86°F).....	91
Table E-21.	Maximum Sustainable Speed, Cloudy, 50% Relative Humidity, 35°C (95°F).....	92
Table E-22.	Maximum Sustainable Speed, Cloudy, 75% Relative Humidity, 5°C (41°F).....	93
Table E-23.	Maximum Sustainable Speed, Cloudy, 75% Relative Humidity, 10°C (50°F).....	94
Table E-24.	Maximum Sustainable Speed, Cloudy, 75% Relative Humidity, 15°C (59°F).....	95
Table E-25.	Maximum Sustainable Speed, Cloudy, 75% Relative Humidity, 20°C (68°F).....	96

List of Tables (cont'd)

Table E-26.	Maximum Sustainable Speed, Cloudy, 75% Relative Humidity, 25°C (77°F).....	97
Table E-27.	Maximum Sustainable Speed, Cloudy, 75% Relative Humidity, 30°C (86°F).....	98
Table E-28.	Maximum Sustainable Speed, Cloudy, 75% Relative Humidity, 35°C (95°F).....	99
Table E-29.	Maximum Sustainable Speed, Cloudy, 95% Relative Humidity, 5°C (41°F).....	100
Table E-30.	Maximum Sustainable Speed, Cloudy, 95% Relative Humidity, 10°C (50°F).....	101
Table E-31.	Maximum Sustainable Speed, Cloudy, 95% Relative Humidity, 15°C (59°F).....	102
Table E-32.	Maximum Sustainable Speed, Cloudy, 95% Relative Humidity, 20°C (68°F).....	103
Table E-33.	Maximum Sustainable Speed, Cloudy, 95% Relative Humidity, 25°C (77°F).....	104
Table E-34.	Maximum Sustainable Speed, Cloudy, 95% Relative Humidity, 30°C (86°F).....	105
Table E-35.	Maximum Sustainable Speed, Cloudy, 95% Relative Humidity, 35°C (95°F).....	106
Table F-1.	Maximum Sustainable Speed, Night, 5% Relative Humidity, 5°C (41°F).....	108
Table F-2.	Maximum Sustainable Speed, Night, 5% Relative Humidity, 10°C (50°F).....	109
Table F-3.	Maximum Sustainable Speed, Night, 5% Relative Humidity, 15°C (59°F).....	110
Table F-4.	Maximum Sustainable Speed, Night, 5% Relative Humidity, 20°C (68°F).....	111
Table F-5.	Maximum Sustainable Speed, Night, 5% Relative Humidity, 25°C (77°F).....	112
Table F-6.	Maximum Sustainable Speed, Night, 5% Relative Humidity, 30°C (86°F).....	113
Table F-7.	Maximum Sustainable Speed, Night, 5% Relative Humidity, 35°C (95°F).....	114
Table F-8.	Maximum Sustainable Speed, Night, 25% Relative Humidity, 5°C (41°F).....	115
Table F-9.	Maximum Sustainable Speed, Night, 25% Relative Humidity, 10°C (50°F).....	116
Table F-10.	Maximum Sustainable Speed, Night, 25% Relative Humidity, 15°C (59°F).....	117

List of Tables (cont'd)

Table F-11.	Maximum Sustainable Speed, Night, 25% Relative Humidity, 20°C (68°F).....	118
Table F-12.	Maximum Sustainable Speed, Night, 25% Relative Humidity, 25°C (77°F).....	119
Table F-13.	Maximum Sustainable Speed, Night, 25% Relative Humidity, 30°C (86°F).....	120
Table F-14.	Maximum Sustainable Speed, Night, 25% Relative Humidity, 35°C (95°F).....	121
Table F-15.	Maximum Sustainable Speed, Night, 50% Relative Humidity, 5°C (41°F).....	122
Table F-16.	Maximum Sustainable Speed, Night, 50% Relative Humidity, 10°C (50°F).....	123
Table F-17.	Maximum Sustainable Speed, Night, 50% Relative Humidity, 15°C (59°F).....	124
Table F-18.	Maximum Sustainable Speed, Night, 50% Relative Humidity, 20°C (68°F).....	125
Table F-19.	Maximum Sustainable Speed, Night, 50% Relative Humidity, 25°C (77°F).....	126
Table F-20.	Maximum Sustainable Speed, Night, 50% Relative Humidity, 30°C (86°F).....	127
Table F-21.	Maximum Sustainable Speed, Night, 50% Relative Humidity, 35°C (95°F).....	128
Table F-22.	Maximum Sustainable Speed, Night, 75% Relative Humidity, 5°C (41°F).....	129
Table F-23.	Maximum Sustainable Speed, Night, 75% Relative Humidity, 10°C (50°F).....	130
Table F-24.	Maximum Sustainable Speed, Night, 75% Relative Humidity, 15°C (59°F).....	131
Table F-25.	Maximum Sustainable Speed, Night, 75% Relative Humidity, 20°C (68°F).....	132
Table F-26.	Maximum Sustainable Speed, Night, 75% Relative Humidity, 25°C (77°F).....	133
Table F-27.	Maximum Sustainable Speed, Night, 75% Relative Humidity, 30°C (86°F).....	134
Table F-28.	Maximum Sustainable Speed, Night, 75% Relative Humidity, 35°C (95°F).....	135
Table F-29.	Maximum Sustainable Speed, Night, 95% Relative Humidity, 5°C (41°F).....	136
Table F-30.	Maximum Sustainable Speed, Night, 95% Relative Humidity, 10°C (50°F).....	137

List of Tables (cont'd)

Table F-31.	Maximum Sustainable Speed, Night, 95% Relative Humidity, 15°C (59°F).....	138
Table F-32.	Maximum Sustainable Speed, Night, 95% Relative Humidity, 20°C 68°F).....	139
Table F-33.	Maximum Sustainable Speed, Night, 95% Relative Humidity, 25°C (77°F).....	140
Table F-34.	Maximum Sustainable Speed, Night, 95% Relative Humidity, 30°C (86°F).....	141
Table F-35.	Maximum Sustainable Speed, Night, 95% Relative Humidity, 35°C (95°F).....	142
Table G-1.	Maximum Sustainable Speed, Partly Cloudy, 5% Relative Humidity, 5°C (41°F).....	144
Table G-2.	Maximum Sustainable Speed, Partly Cloudy, 5% Relative Humidity, 10°C (50°F).....	145
Table G-3.	Maximum Sustainable Speed, Partly Cloudy, 5% Relative Humidity, 15°C (59°F).....	146
Table G-4.	Maximum Sustainable Speed, Partly Cloudy, 5% Relative Humidity, 20°C (68°F).....	147
Table G-5.	Maximum Sustainable Speed, Partly Cloudy, 5% Relative Humidity, 25°C (77°F).....	148
Table G-6.	Maximum Sustainable Speed, Partly Cloudy, 5% Relative Humidity, 30°C (86°F).....	149
Table G-7.	Maximum Sustainable Speed, Partly Cloudy, 5% Relative Humidity, 35°C (95°F).....	150
Table G-8.	Maximum Sustainable Speed, Partly Cloudy, 25% Relative Humidity, 5°C (41°F).....	151
Table G-9.	Maximum Sustainable Speed, Partly Cloudy, 25% Relative Humidity, 10°C (50°F).....	152
Table G-10.	Maximum Sustainable Speed, Partly Cloudy, 25% Relative Humidity, 15°C (59°F).....	153
Table G-11.	Maximum Sustainable Speed, Partly Cloudy, 25% Relative Humidity, 20°C (68°F).....	154
Table G-12.	Maximum Sustainable Speed, Partly Cloudy, 25% Relative Humidity, 25°C (77°F).....	155
Table G-13.	Maximum Sustainable Speed, Partly Cloudy, 25% Relative Humidity, 30°C (86°F).....	156
Table G-14.	Maximum Sustainable Speed, Partly Cloudy, 25% Relative Humidity, 35°C (95°F).....	157
Table G-15.	Maximum Sustainable Speed, Partly Cloudy, 50% Relative Humidity, 5°C (41°F).....	158

List of Tables (cont'd)

Table G-16.	Maximum Sustainable Speed, Partly Cloudy, 50% Relative Humidity, 10°C (50°F).....	159
Table G-17.	Maximum Sustainable Speed, Partly Cloudy, 50% Relative Humidity, 15°C (59°F).....	160
Table G-18.	Maximum Sustainable Speed, Partly Cloudy, 50% Relative Humidity, 20°C (68°F).....	161
Table G-19.	Maximum Sustainable Speed, Partly Cloudy, 50% Relative Humidity, 25°C (77°F).....	162
Table G-20.	Maximum Sustainable Speed, Partly Cloudy, 50% Relative Humidity, 30°C (86°F).....	163
Table G-21.	Maximum Sustainable Speed, Partly Cloudy, 50% Relative Humidity, 35°C (95°F).....	164
Table G-22.	Maximum Sustainable Speed, Partly Cloudy, 75% Relative Humidity, 5°C (41°F).....	165
Table G-23.	Maximum Sustainable Speed, Partly Cloudy, 75% Relative Humidity, 10°C (50°F).....	166
Table G-24.	Maximum Sustainable Speed, Partly Cloudy, 75% Relative Humidity, 15°C (59°F).....	167
Table G-25.	Maximum Sustainable Speed, Partly Cloudy, 75% Relative Humidity, 20°C (68°F).....	168
Table G-26.	Maximum Sustainable Speed, Partly Cloudy, 75% Relative Humidity, 25°C (77°F).....	169
Table G-27.	Maximum Sustainable Speed, Partly Cloudy, 75% Relative Humidity, 30°C (86°F).....	170
Table G-28.	Maximum Sustainable Speed, Partly Cloudy, 75% Relative Humidity, 35°C (95°F).....	171
Table G-29.	Maximum Sustainable Speed, Partly Cloudy, 95% Relative Humidity, 5°C (41°F).....	172
Table G-30.	Maximum Sustainable Speed, Partly Cloudy, 95% Relative Humidity, 10°C (50°F).....	173
Table G-31.	Maximum Sustainable Speed, Partly Cloudy, 95% Relative Humidity, 15°C (59°F).....	174
Table G-32.	Maximum Sustainable Speed, Partly Cloudy, 95% Relative Humidity, 20°C (68°F).....	175
Table G-33.	Maximum Sustainable Speed, Partly Cloudy, 95% Relative Humidity, 25°C (77°F).....	176
Table G-34.	Maximum Sustainable Speed, Partly Cloudy, 95% Relative Humidity, 30°C (86°F).....	177
Table G-35.	Maximum Sustainable Speed, Partly Cloudy, 95% Relative Humidity, 35°C (95°F).....	178

Preface

This effort was sponsored under the US Army Soldier System Modeling Science and Technology Objective (SSM STO) project managed by the US Army Natick Research, Development and Engineering Center, Natick, Massachusetts, in response to a data request received from the US Army Training and Doctrine Command (TRADOC) Analysis Center - White Sands Missile Range (TRAC-WSMR).

The simulation and analyses were performed by Mr. Theodore Hayes, Simulation Technologies, Inc.

The Project Officer for this effort was John A. O'Keefe IV, Operations Research Analyst, Modeling and Simulation Branch, Advanced Concepts Division, Advanced Systems Concepts Directorate, U.S. Army Soldier Systems Command.

Dismounted Infantry Movement Rate Study

1 Purpose

The purpose of this study was to determine sustainable movement rates for dismounted infantry under a variety of terrain and meteorological conditions. The objective was to generate a table that can be used to look-up the maximum sustainable movement rate (i.e., speed) for a given meteorological condition and terrain characteristic. Only one load and uniform configuration for the soldier was considered in this study.

This study was performed at the request of the U.S. Army Training and Doctrine Command (TRADOC) Analysis Command, White Sands Missile Range. A copy of the letter requesting the study is contained in Appendix A.

2 Approach

The only factor considered in this study as a limit to the movement speed of a soldier was heat stress. Therefore, the objective was to determine (for each set of meteorological and terrain conditions) the maximum speed a soldier could walk (or march, or run) for a sustained period without causing the soldier to become a heat casualty (i.e., rendering the soldier incapable of continuing activity without an extended rest and recovering period).

The heat stress encountered by a soldier is a function of three basic factors: the soldier's workload, the meteorological conditions, and the thermal and moisture permeability characteristics of the clothing and equipment worn.

A soldier's workload can be measured as total metabolic rate (in watts) and as the amount of external work performed (also in watts). These factors, in turn, are a function of the following: the soldier's weight, the weight and distribution of the load carried by the soldier, the walking speed of the soldier, the type of terrain, and the grade of the terrain.

A two step approach was taken in this study to meet the objectives. First, given the one soldier load and uniform configuration, the maximum sustainable metabolic rates were determined for a given set of meteorological conditions. Second, the maximum sustainable speeds were determined for a given set of terrain characteristics based on the maximum sustainable metabolic rates developed in the first step.

2.1 Range of Conditions Considered

Each soldier in this study was assumed to be: 70 kilograms (kg) in weight, 1.7 meters (m) tall, and 23 years of age.

Each soldier was assumed to be wearing or carrying the following: Personnel Armor System for Ground Troops (PASGT) Helmet, PASGT Vest, Load Bearing Equipment (LBE), M16A1, 120 rounds 5.56 millimeter (mm), 1 canteen of water, 2 fragmentation grenades, first aid pouch, bayonet, 2 ammo pouches, and the Battle Dress Uniform (BDU). Total load was calculated as approximately 20 kg. Thermal insulation factor (clo) was assumed to be 0.7, and the moisture permeability index (im) was assumed to be 0.476.

The meteorological conditions considered consisted of three basic factors: ambient temperature, relative humidity, and cloud cover (i.e., solar load). Ambient temperature ranges considered were 5 to 35°C in 5°C steps (41°F to 91°F). Relative humidity values considered were 5, 25, 50, 75, and 95%. Four cloud cover conditions were considered: Night, Cloudy, Partly Cloudy, and Clear Sky. Cloud cover effects the “solar load” on the soldier. This factor is considered in the model as the mean radiant temperature. Based on information provided by U. S. Army Research Institute of Environmental Medicine (USARIEM) (Matthew 1994), mean radiant temperature was calculated by adding a value for each cloud cover condition to the ambient temperature. Values used for this study were: Night @ 5°C, Cloudy @ 17.5°C, Partly Cloudy @ 35°C, and Clear Sky @ 45°C.

The terrain characteristics considered in this study were type and grade. The three types of terrain considered were: Black Top Road, Dirt Road, and Loose Sand. Terrain grades from -50% to +50% were considered (note: +1% grade = 1 meter increase in elevation for each 100 meters traveled horizontally). Between -20% and +20% steps of 5% were used, otherwise steps of 10% were used.

2.2 Maximum Sustainable Metabolic Rates

Maximum sustainable metabolic rates were determined by multiple runs of the Heat Stress Model from the Integrated Unit Simulation System (IUSS). This heat model is an implementation of a model developed for USARIEM (Kraning 1991) and has been verified by the original author (Kraning 1994). A standalone version of the IUSS heat model was used for this study. (Note: the stand-alone version uses the same heat model “C++ objects” used by the IUSS, but operates with just a single soldier under a directly controllable set of conditions).

For each set of meteorological conditions, the model was run with total metabolic rates ranging from 100 to 1000 watts at steps of 50 watts (note: for purposes of this phase of the study, it was assumed that the amount of external work performed by the soldier was 10% of the total metabolic rate, and that the wind speed was 2.5 meters per second (m/s)). Each case was run for up to four simulated hours with constant conditions (i.e., static metabolic and external work rates, and static meteorological conditions). The final core temperature at the end of the four hour period was the primary measure evaluated (note: if the final core temperature exceeded 39.0 °C before the end of the four hour period, the simulation was stopped at that point).

Based on the runs, the maximum metabolic rate which could be sustained without causing the soldier’s final core temperature to exceed each of a target set of temperatures was determined. The target core temperatures used were: 37.5, 37.75, 38.0, 38.25, 38.5, 38.75, and 39.0°C.

2.3 Maximum Sustainable Speed

Maximum sustainable speed for each set of meteorological and terrain conditions was determined by computing the speed which produced the maximum sustainable metabolic rate (for a given target core temperature). The equation used to calculate metabolic rate as a function of the soldier’s weight, load, speed, terrain type, and terrain grade, was taken

from (Pandolf 1977). The original Pandolf equation does not consider negative grades (i.e., walking downhill). Based on discussions with Bill Matthew, USARIEM, and a cursory review of (Kamon 1970), (Davies 1973) and (Pimental 1979), the Pandolf equation was modified to reflect a different metabolic rate and external work performed rate when the soldier is walking downhill. In the revised equation, if the grade is negative, the metabolic cost of walking down an incline is computed as 20% of the metabolic cost of walking up the incline. Likewise the external work performed is computed as 20% of the work performed walking up the incline. All other components (i.e., the metabolic cost of standing, standing with a load, and walking on level ground) remain the same.

Since the Pandolf equation is not directly solvable for speed, an incremental approach was used to determine the speed which produced the target maximum metabolic rate. The speed was started at 0.0 m/s and incremented by 0.05 m/s until the computed metabolic rate exceeded the target maximum. Maximum speed considered was 2.5 m/s. The last speed to produce a metabolic rate less than or equal to the target maximum was considered the maximum sustainable speed.

Terrain factors applied in the (Pandolf 1977) equation for Black Top, Dirt Road, and Loose Sand were 1.0, 1.1, and 2.1 respectively.

3 Results

3.1 Step 1, Maximum Sustainable Metabolic Rates

Selected plots of results from the first step of this study are shown in Figure B-1 through Figure B-6. These charts show the maximum sustainable metabolic rate as a function of ambient temperature for selected relative humidity and cloud cover conditions for each of the target final core temperatures. As one would expect, the higher the ambient temperature, the lower the maximum sustainable metabolic rate. This holds for all target temperatures except 37.5°C; in this case, the sweating and shivering components in the IUSS heat model caused the core temperature to rise above 37.5°C.

The data in Figure B-1 through Figure B-6 also show that the difference in maximum sustainable metabolic rates among the higher target core temperatures (38.25°C and above) is relatively small across the range of ambient temperature. This indicates that for these conditions a small increase in metabolic rate can significantly increase the heat stress. At lower target core temperatures (below 38.25°C), the data show that much greater changes in metabolic rates do not increase the heat stress significantly.

The IUSS Heat Stress Model uses the core temperature to degrade the performance of the soldier using the following scale:

- < 37.5°C @ no degradation,
- 37.5 to 38.0°C @ 10% degradation,
- 38.0 to 38.5°C @ 25% degradation,
- 38.5 to 39.0°C @ 50% degradation, and,

> 39.0°C @ 100% or complete degradation.

This scale and the observed sensitivity of final core temperature to metabolic rate were used to select three target final core temperatures to represent low, moderate, and high risk levels for heat stress. The low risk level was selected as 37.75°C, the moderate risk level was selected as 38.0°C, and the high risk level was selected as 38.75°C.

3.2 Step 2, Maximum Sustainable Speeds

The tables in Appendix D through Appendix G show the entire set of results from the second step of this study. These tables present the maximum sustainable speed data at each risk level (low, moderate and high) in meters per second (m/s), kilometers per hour (kph), and miles per hour (mph). The following paragraphs will discuss the sensitivities observed in the data when analyzed from various perspectives.

Selected plots of maximum sustainable speed at given risk levels across the range of ambient temperatures are shown in Figure C-1 through C-3. These data show that the range between low and high risk is larger at lower temperatures but narrows at the higher temperatures. In all the remaining plots, the maximum sustainable speed is only shown for the moderate risk level.

C-4 shows a plot of the maximum sustainable speed at given cloud cover conditions. These data show that the maximum sustainable speed is relatively insensitive to cloud cover at ambient temperatures below 30°C, but somewhat sensitive above that temperature.

C-5 and C-6 show plots of maximum sustainable speed given relative humidity across the range of ambient temperatures. These data indicate that maximum sustainable speed is relatively insensitive to relative humidity below 20°C, somewhat sensitive between 20 and 25°C, and very sensitive above 25°C.

C-7 through C-24 show plots of maximum sustainable speed given positive terrain grade across the range of ambient temperatures for selected cloud cover, relative humidity, and terrain type combinations. These data show that maximum sustainable speed is very sensitivity to terrain grade. The greatest sensitivity is between 0 and 15% grades. At grades steeper than 15%, the maximum sustainable speed is less sensitive to grade, but the sustainable speeds are slow (< 1 m/s).

C-25 through C-34 show plots of maximum sustainable speed give terrain type across the range of terrain grades for selected meteorological conditions. These plots confirm the sensitivity to positive grades discussed above. As should be expected, the sensitivity to negative grades is less pronounced. These data show that there is little difference between Black Top and Dirt Road, but a significant difference when walking in Loose Sand.

4 Limitations

The data generated in this study can be used to estimate the maximum sustainable movement rate for dismounted infantry over a wide range of meteorological conditions and terrain characteristics. However, there are certain limitations which must be understood when trying to apply these data. Additional research is required to explore the impact of each of the limitations discussed below.

4.1 Performance Degradation as a Function of Time

This study considered only the core temperature as a measure of the soldiers performance degradation which, in turn, was used to determine the limit of movement speed. Other factors, such as heart rate and fatigue, should also be considered in the measure of performance degradation. Unfortunately, no methodology for including these factors was available. It is also true that as a soldier's performance degrades over time, the efficiency of work performed decreases. This requires higher metabolic expenditure rates to achieve the same work (e.g., walking speed). This dynamic workload, as a function performance degradation, was not considered in this study.

4.2 Single Load and Uniform Configuration

This study only considered a single uniform and load configuration. No cases to test the sensitivity of the results to variant loads and thermal and moisture permeability factors were made. Therefore, no attempt should be made to extrapolate the data presented to other load or uniform configurations.

4.3 Temperature Extremes

The only factor considered in this study as a limit to movement rate was heat stress. At lower temperatures (e.g., below 15°C or 59°F) it is possible that other factors, for example, fatigue or equipment encumbrance, may prove more limiting to sustainable movement rate than heat stress. At high temperatures (e.g., above 30°C or 82.5°F) the heat stress factor appears to be overwhelming, and the data indicate that no movement can be sustained. This may, or may not, be the case since no consideration of rest cycles was considered in the study.

4.4 Single Constant Wind Velocity

This study only considered a single constant wind velocity of 2.5 m/s. Evaporative water heat transfer and thermal heat transfer are directly related to wind velocity, but are diminished by increases in relative humidity. Therefore, significant error in maximum sustainable metabolic rate may occur if the wind velocity varies significantly.

4.5 Sustained Movement versus Move then Rest

This study used static (i.e., sustained) workloads to determine maximum sustainable movement rates. Therefore, the rates presented represent those that the model shows can be sustained continuously (or at least for four hours). It is possible that other movement

schemes could result in higher aggregate sustainable movement rates than a constant speed movement scheme. Such schemes could employ a move then stop to rest cycle (i.e., work/rest cycle), or even a rapid movement followed by slow movement cycle, or more complex combinations. No cases considering alternate movement schemes were considered in this study.

4.6 Workloads on Steep Terrain Grades

The use of the (Pandolf 1977) equation at terrain grades above 15% has not been validated, nor has the modified equation for negative grades been validated. Therefore, the maximum sustainable speed data for the higher grades and negative grades should be used with caution.

This study did not look at movement on (up or down) terrain grades greater than 50% (or 30°). At such steep grades a soldier is climbing more than walking. The limited nature of this study prohibited an exhaustive search for methods to determine soldier workloads on such steep terrain.

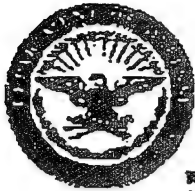
List of References

1. Kraning, K. K. A computer Simulation for Predicting the Time Course of Thermal and Cardiovascular Responses to Various Combinations of Heat Stress, Clothing and Exercise. Technical Report T13-91, U.S. Army Research Institute of Environmental Medicine, Natick MA, June 1991.
2. Kraning, K. K. Memo: Verification of IUSS Heat Strain Model. Informal Progress Report to U.S. Army Research Institute of Environmental Medicine, Natick MA, Soldier Performance Database and Modeling Psychological and Physiological Effects of Military Environments and Operations, 24 March 1994.
3. Matthew, W. "Proposed scheduled for relating mean radiant temperature elevations to solar load inputs", FAX Communications, U.S. Army Research Institute of Environmental Medicine, Natick MA, March 1994.
4. Pandolf, K. B., B. Givoni, R. F. Goldman. Predicting energy expenditure with loads while standing or walking very slowly. *Journal of Applied Physiology* 43(4): 577-581, 1977.
5. Kamon, E. Negative and positive work in climbing a laddermill. *Journal of Applied Physiology* 29(1):1-5, July 1970
6. Davies, C. T. M., A. J. Sargeant, B. Smith. The Physiological Responses to Running Downhill. *European Journal of Applied Physiology* 32: 187-194, 1974.
7. Pimental, N. A., K. B. Pandolf. Energy expenditure while standing or walking slowly uphill or downhill with loads. *Ergonomics*, 22(8): 963-973, 1979.

Appendixes

Appendix A

TRADOC Request Letter



DEPARTMENT OF THE ARMY
US ARMY TRADOC ANALYSIS COMMAND
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5502

REPLY TO
ATTENTION OF
ATRC-WA

17 March 1994

MEMORANDUM FOR Technical Director, US Army Natick Research,
Development and Engineering Center
(Dr. Lewis), Natick, MA 01760-5015

SUBJECT: Dismounted Infantry Movement Rates

1. Request by 8 Apr 94 cross-country dismounted infantry movement rates for inclusion into CASTFOREM to support the Land Warrior COEA.
2. This is in reference to a telephone conversation with Mr. John O'Keefe concerning the subject above. Mr. O'Keefe stated that IUSS could provide these rates given the parameters.
3. Request that Natick provide these movement rates (in meters/seconds) with the following minimum parameters/conditions:
 - a. Soldier's load will be combat load (i.e., LBE, PASGT helmet and vest, M16A2, 120 rounds 5.56 mm ammo, 2 canteens of water, 2 FRAG hand grenades, bayonet, BDU and no rucksack or chemical overgarment).
 - b. Use different slopes from 0-60 degrees in 5 degree increments. These we will refine/group into a smaller set for use by CASTFOREM.
 - c. The CASTFOREM model uses 3 different soil types grouped into "GOOD, FAIR, and POOR". These cross-country types are not tied to road surfaces.
 - d. Use ascending and descending slopes (if different).
 - e. Use both DAY and NIGHT conditions.
4. POC for this request is CPT Chris Corbett, DSN 258-5170.

FOR THE DIRECTOR:

Stephen J. Powell
STEPHEN J. POWELL, MAJ, IN
Senior Military Analyst

Appendix B

Maximum Sustainable Metabolic Rate Figures

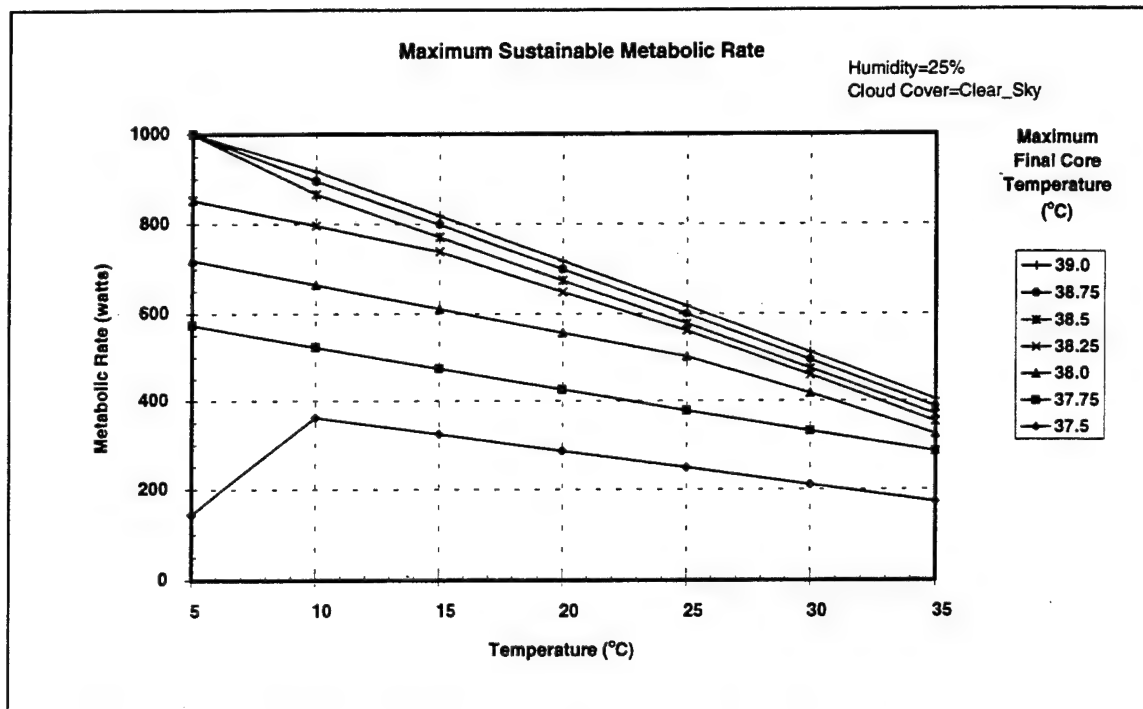


Figure B-1. Maximum Sustainable Metabolic Rate, Clear Sky, 25% Humidity.

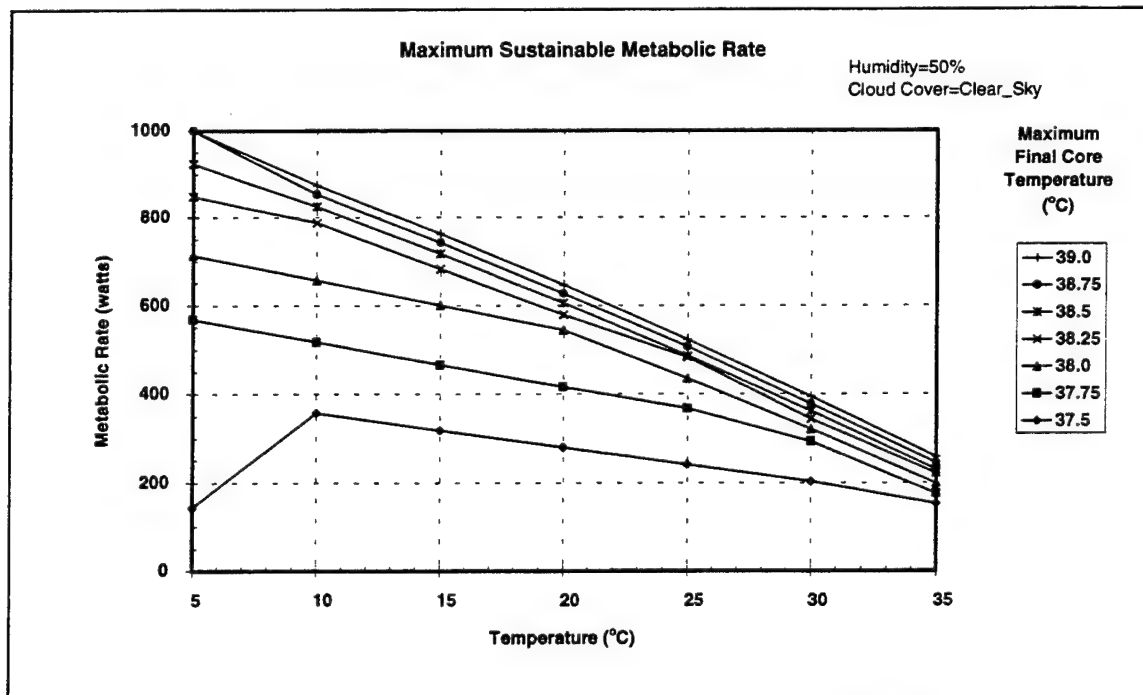


Figure B-2. Maximum Sustainable Metabolic Rate, Clear Sky, 50% Humidity.

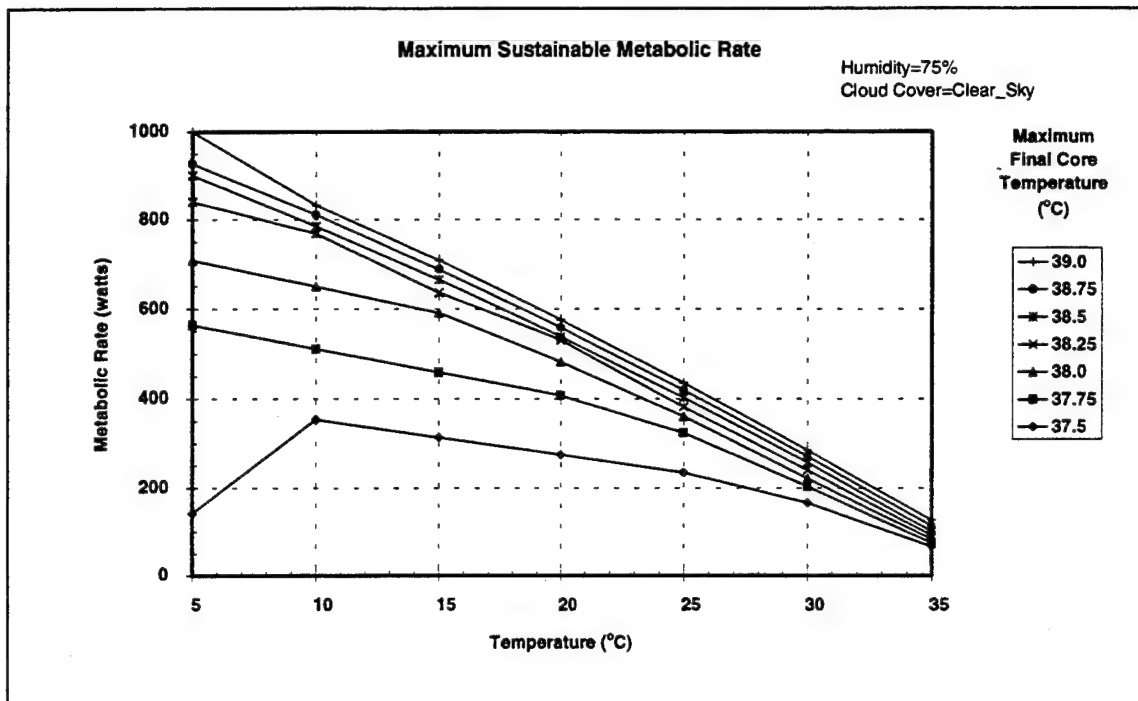


Figure B-3. Maximum Sustainable Metabolic Rate, Clear Sky, 75% Humidity.

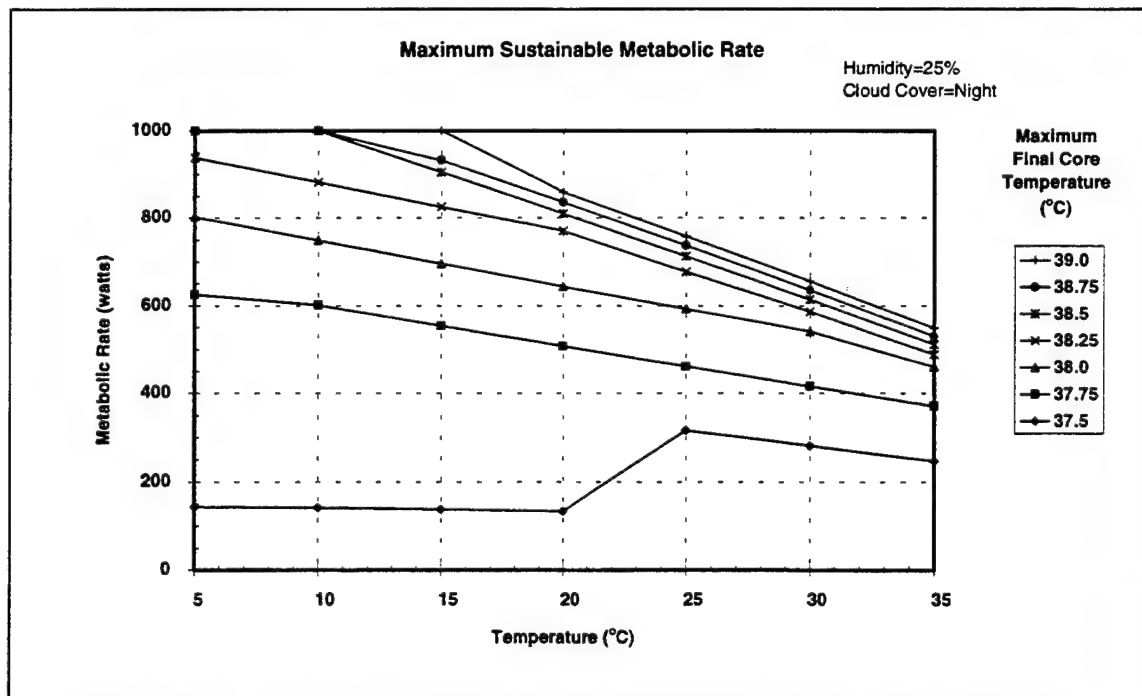


Figure B-4. Maximum Sustainable Metabolic Rate, Night, 25% Humidity.

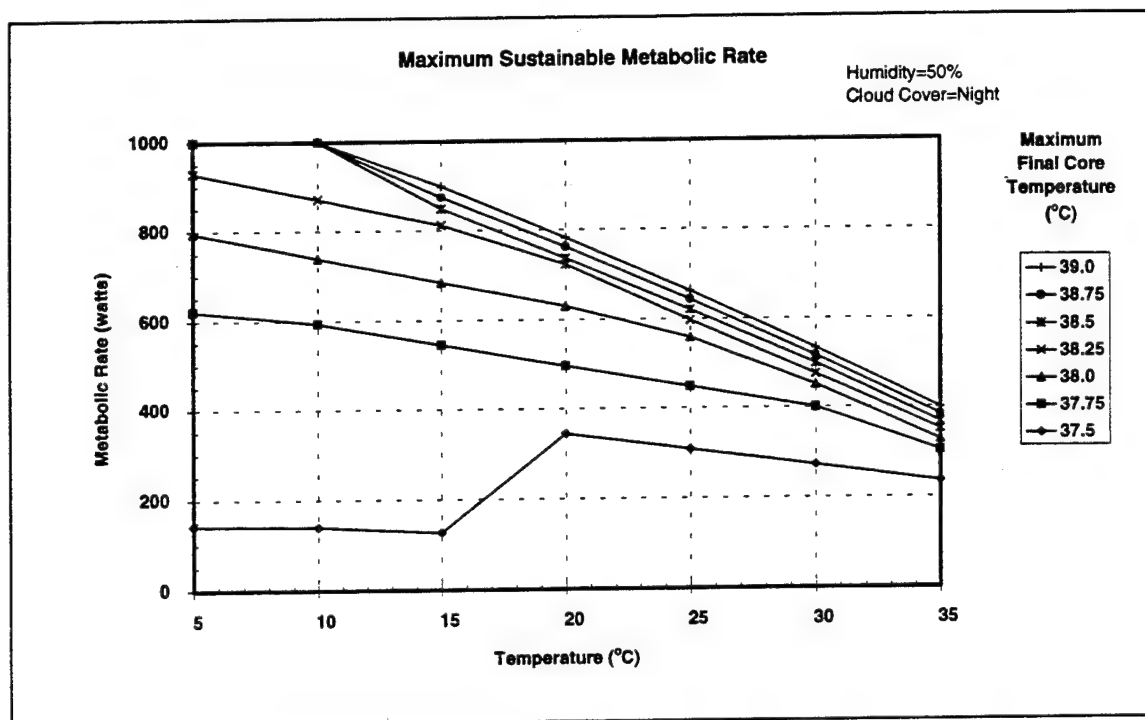


Figure B-5. Maximum Sustainable Metabolic Rate, Night, 50% Humidity.

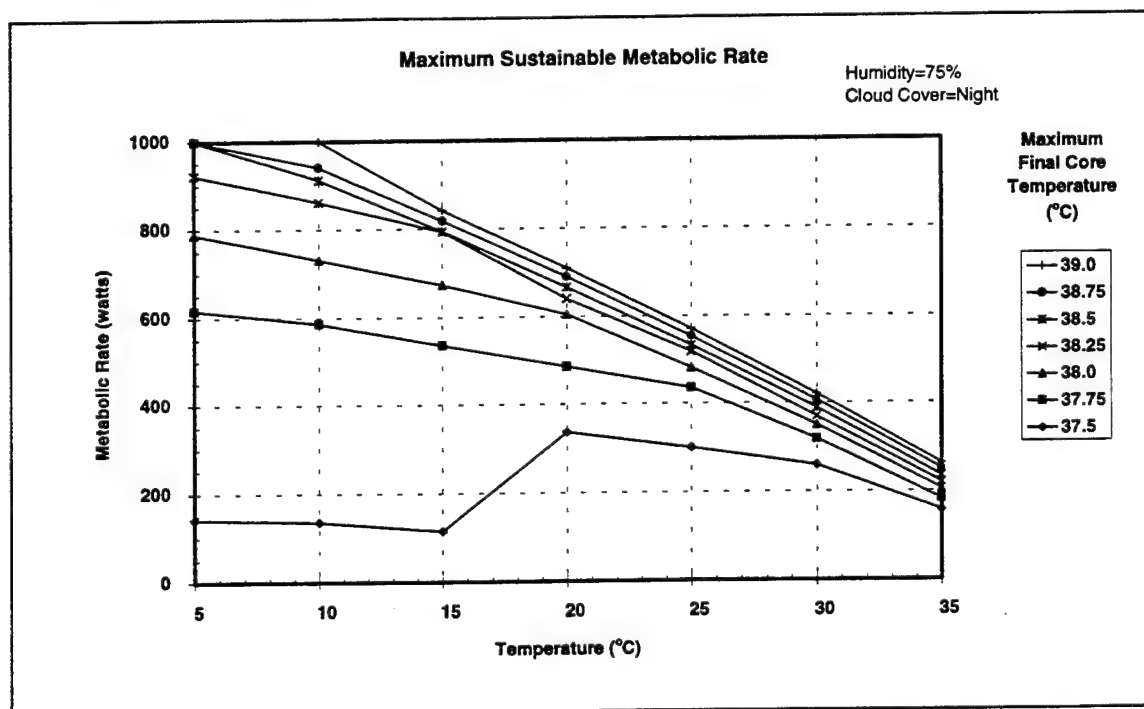


Figure B-6. Maximum Sustainable Metabolic Rate, Night, 75% Humidity.

Appendix C

Maximum Sustainable Speed Figures

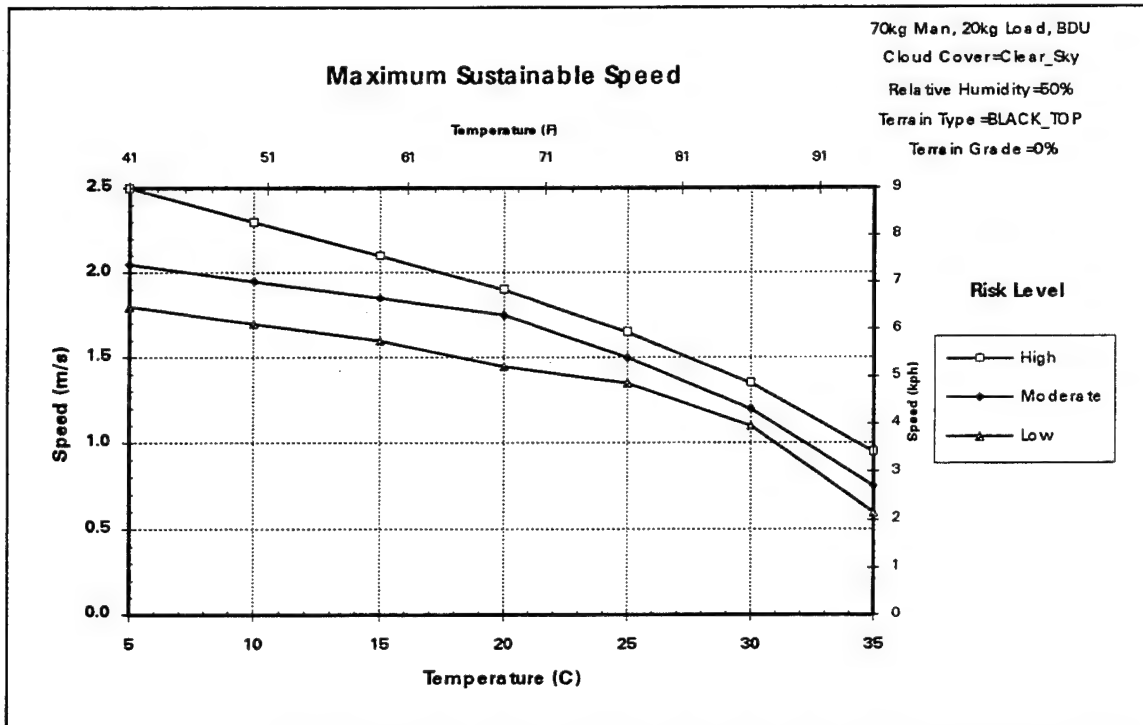


Figure C-1. Maximum Sustainable Speed By Temperature Given Risk, Black Top, 0% Grade, Clear Sky, 50% Relative Humidity.

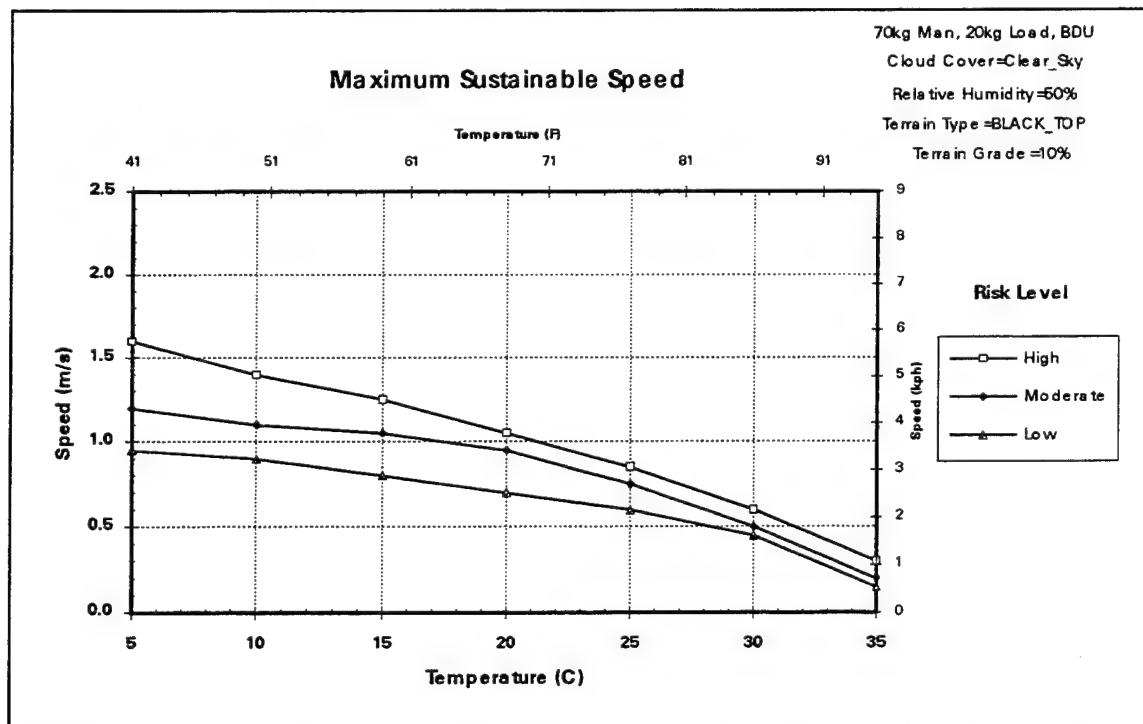


Figure C-2. Maximum Sustainable Speed By Temperature Given Risk, Black Top, 10% Grade, Clear Sky, 50% Relative Humidity.

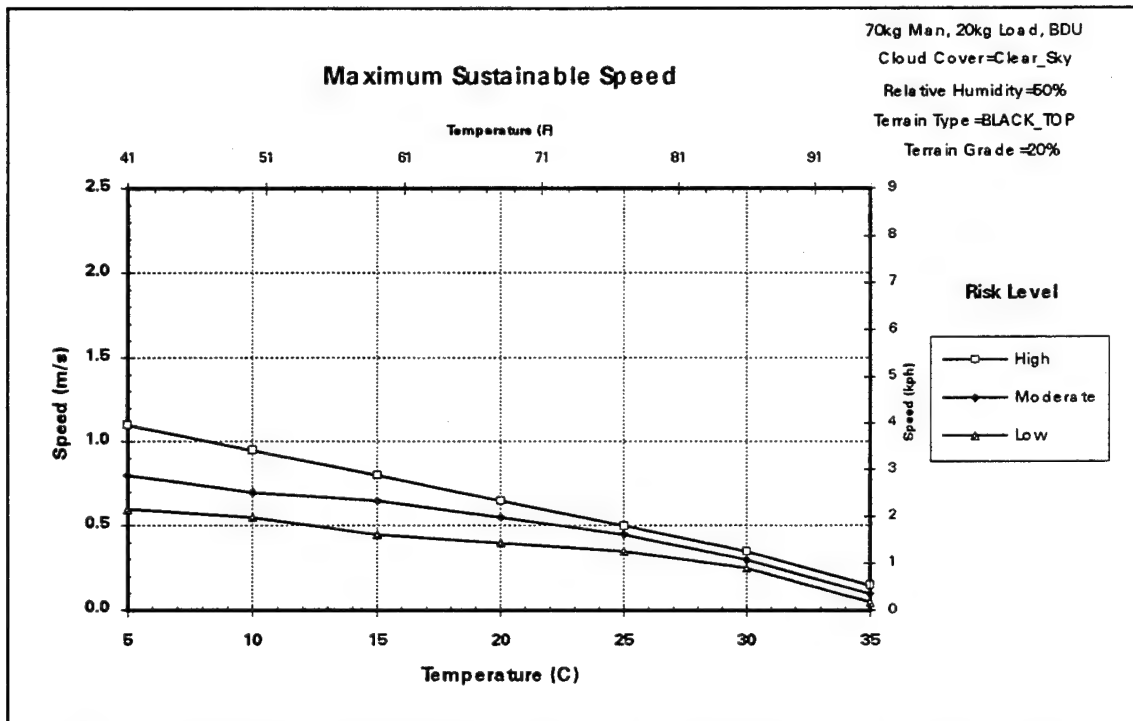


Figure C-3. Maximum Sustainable Speed By Temperature Given Risk, Black Top, 20% Grade, Clear Sky, 50% Relative Humidity.

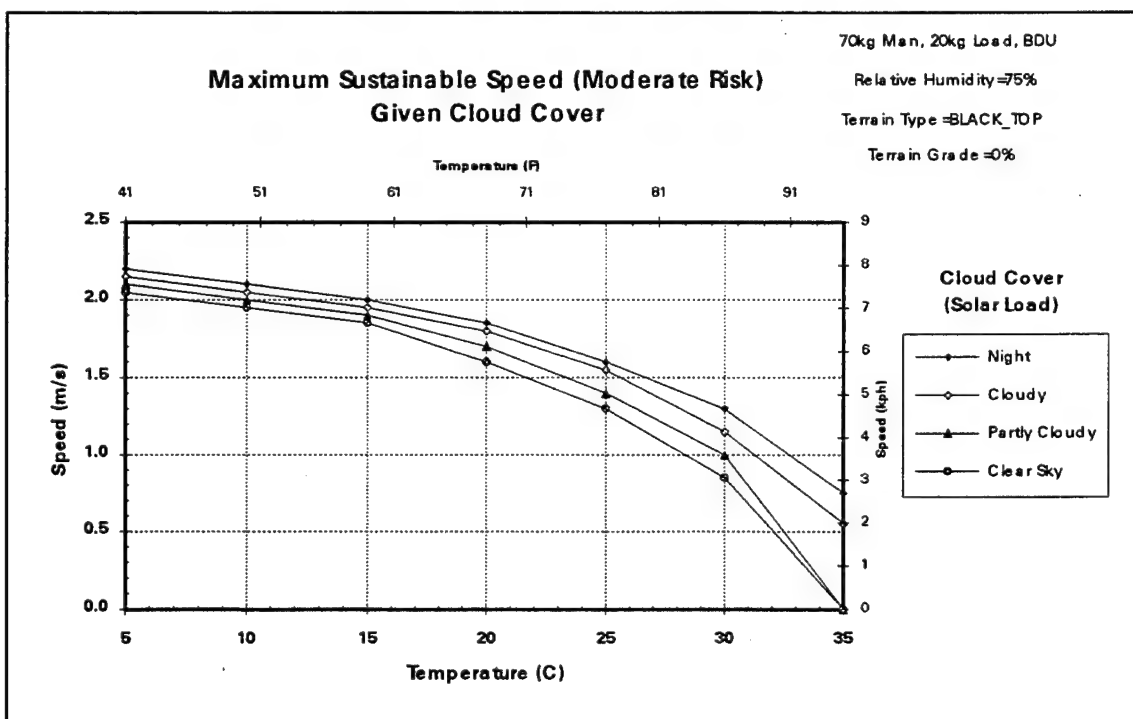


Figure C-4. Maximum Sustainable Speed By Temperature Given Risk, Black Top, 0% Grade, Clear Sky, 75% Relative Humidity.

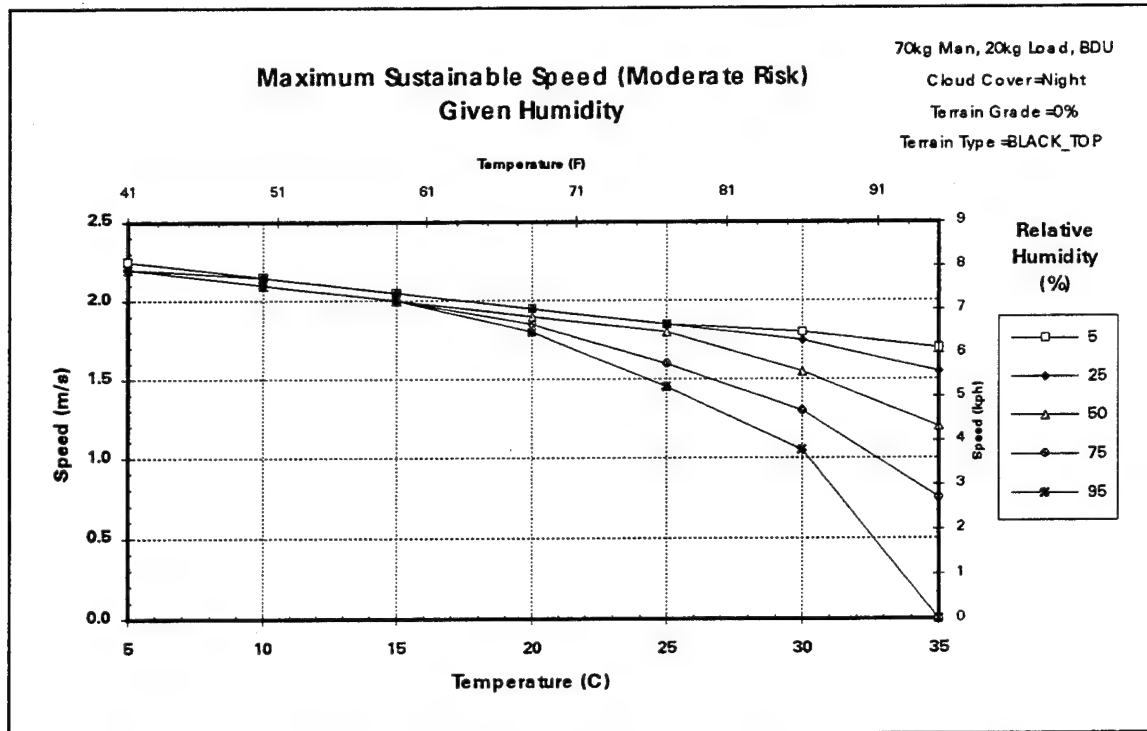


Figure C-5. Maximum Sustainable Speed By Temperature Given Relative Humidity, Black Top, 0% Grade, Night.

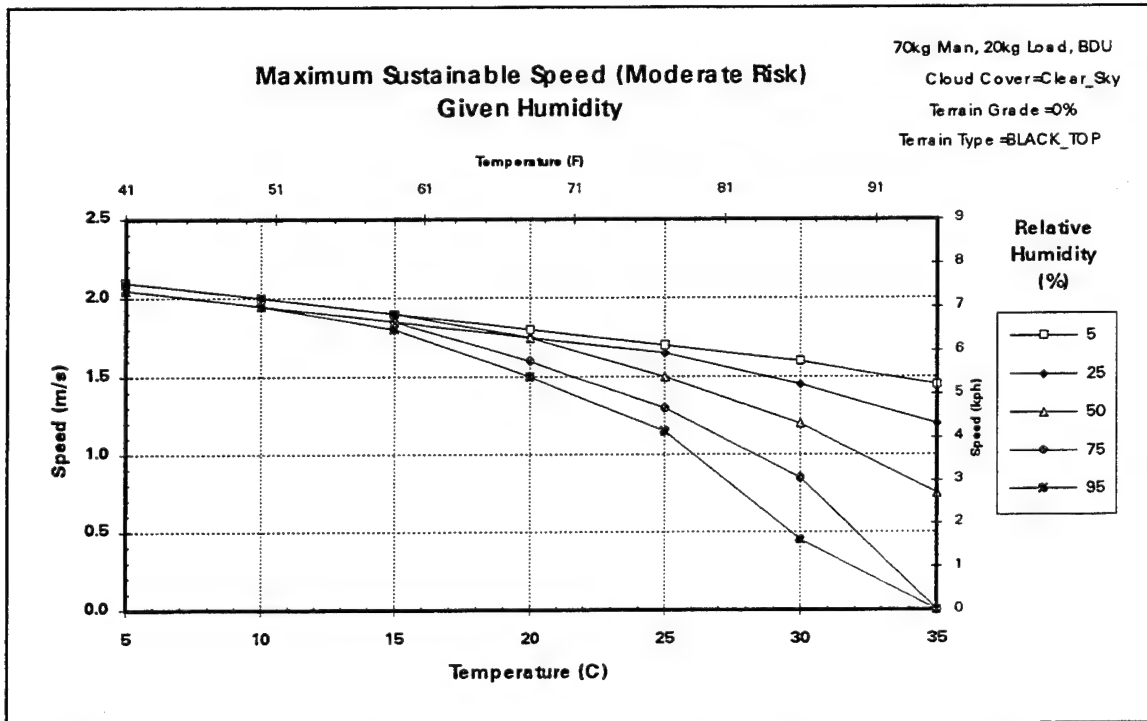


Figure C-6. Maximum Sustainable Speed By Temperature Given Relative Humidity, Black Top, 0% Grade, Clear Sky.

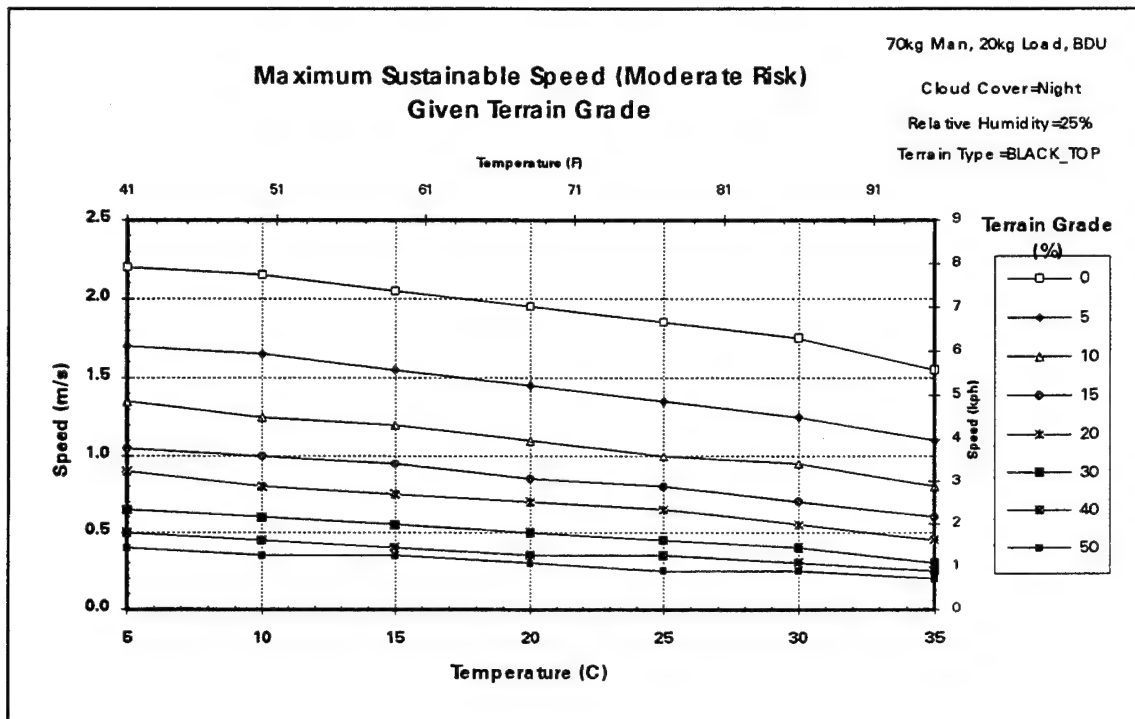


Figure C-7. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Night, 25% Relative Humidity.

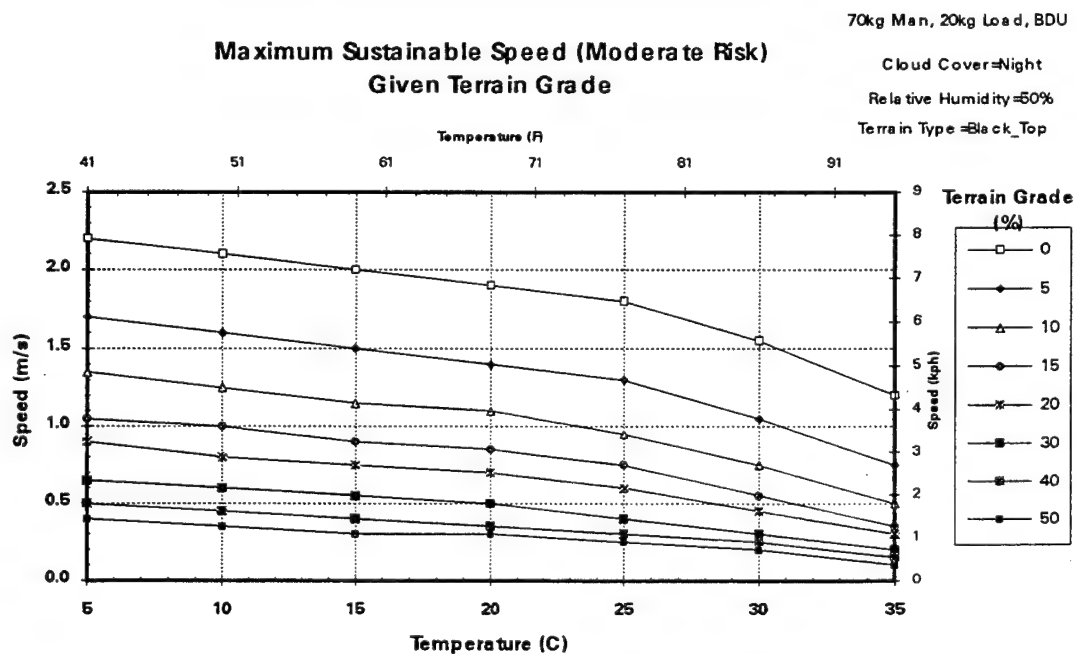


Figure C-8. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Night, 50% Relative Humidity.

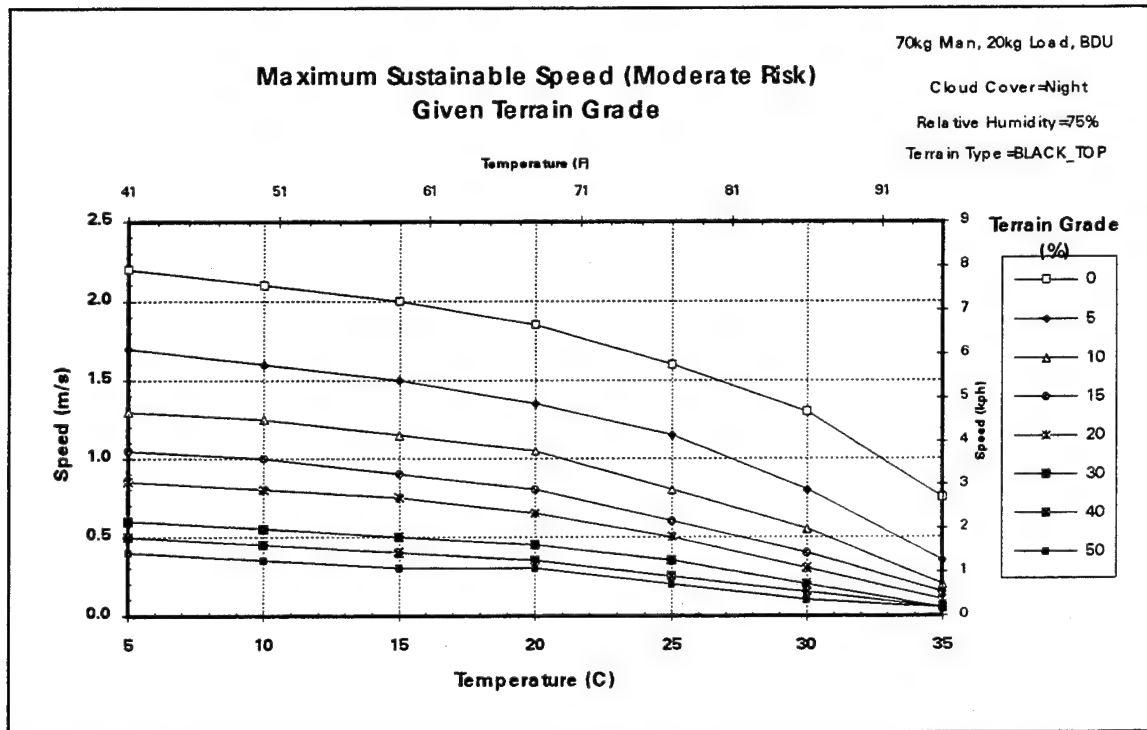


Figure C-9. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Night, 75% Relative Humidity.

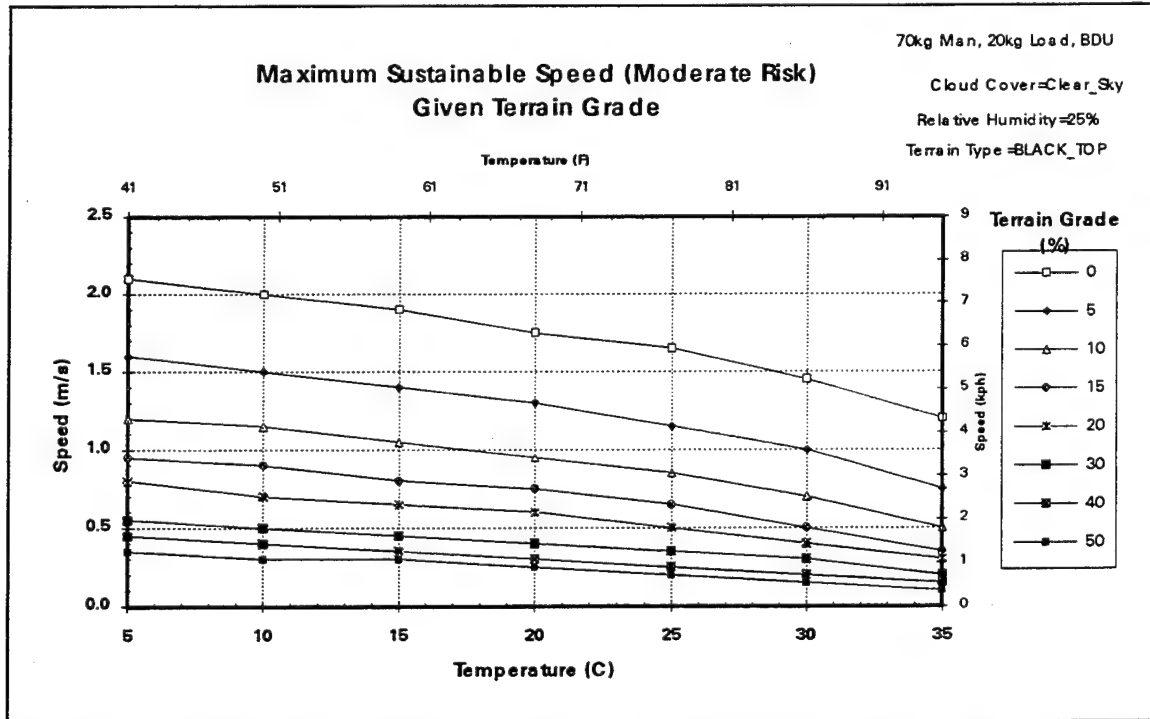


Figure C-10. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Clear Sky, 25% Relative Humidity.

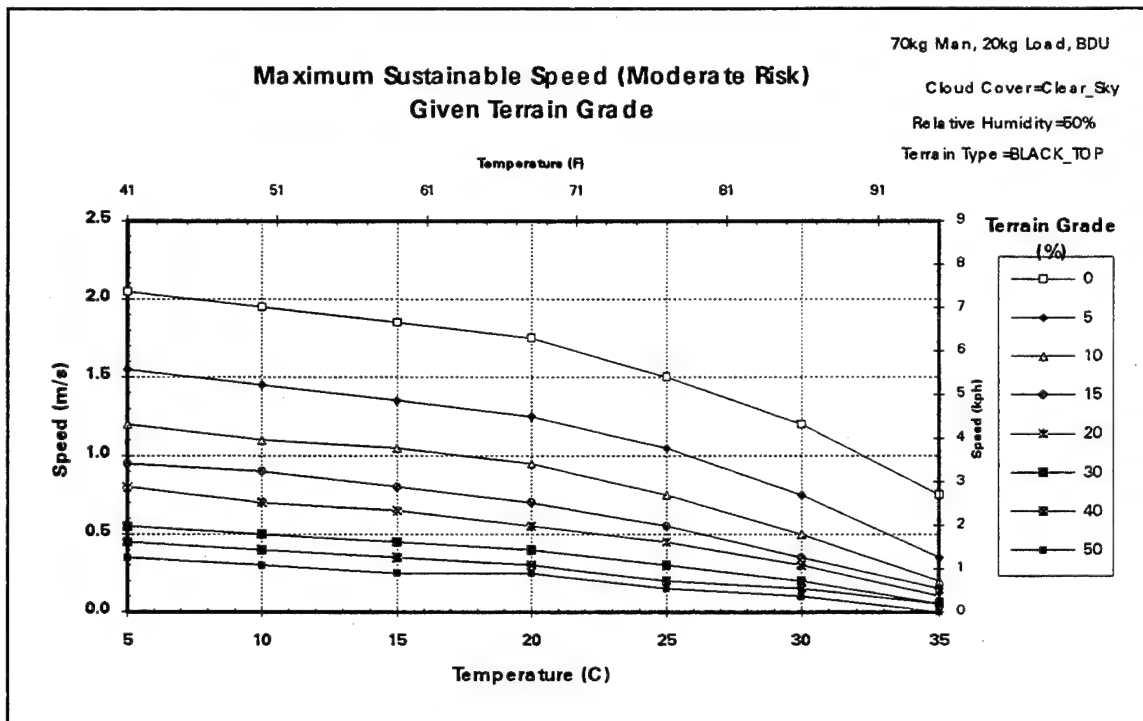


Figure C-11. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Clear Sky, 50% Relative Humidity.

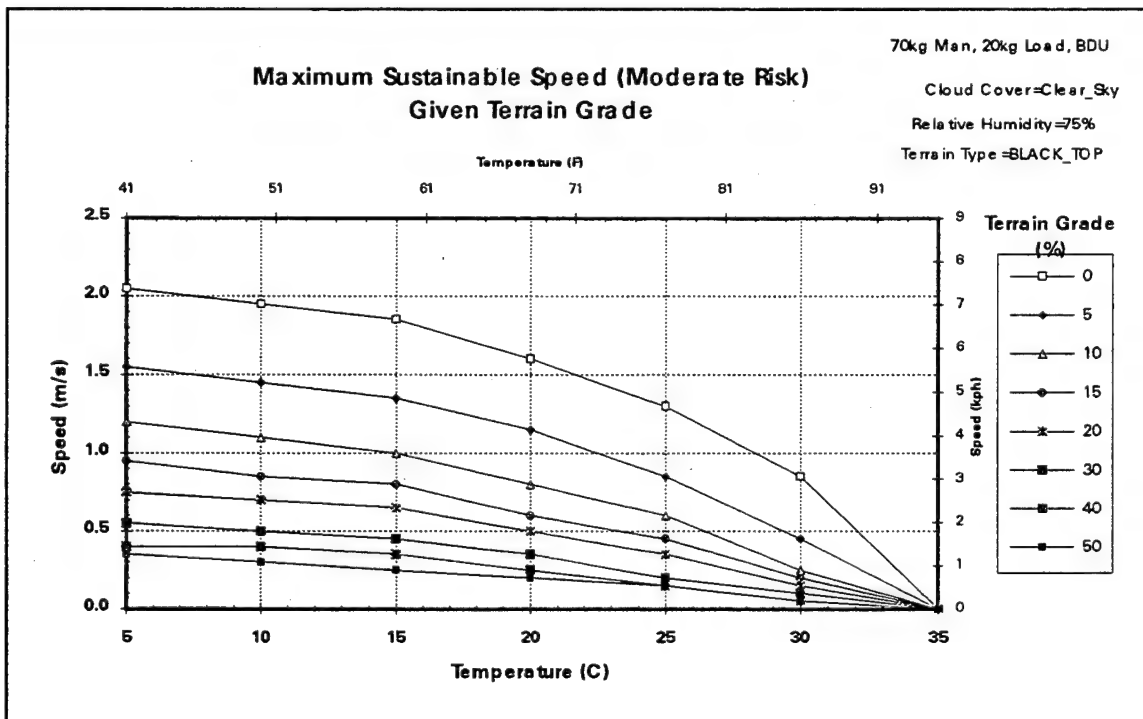


Figure C-12. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Black Top, Clear Sky, 75% Relative Humidity.

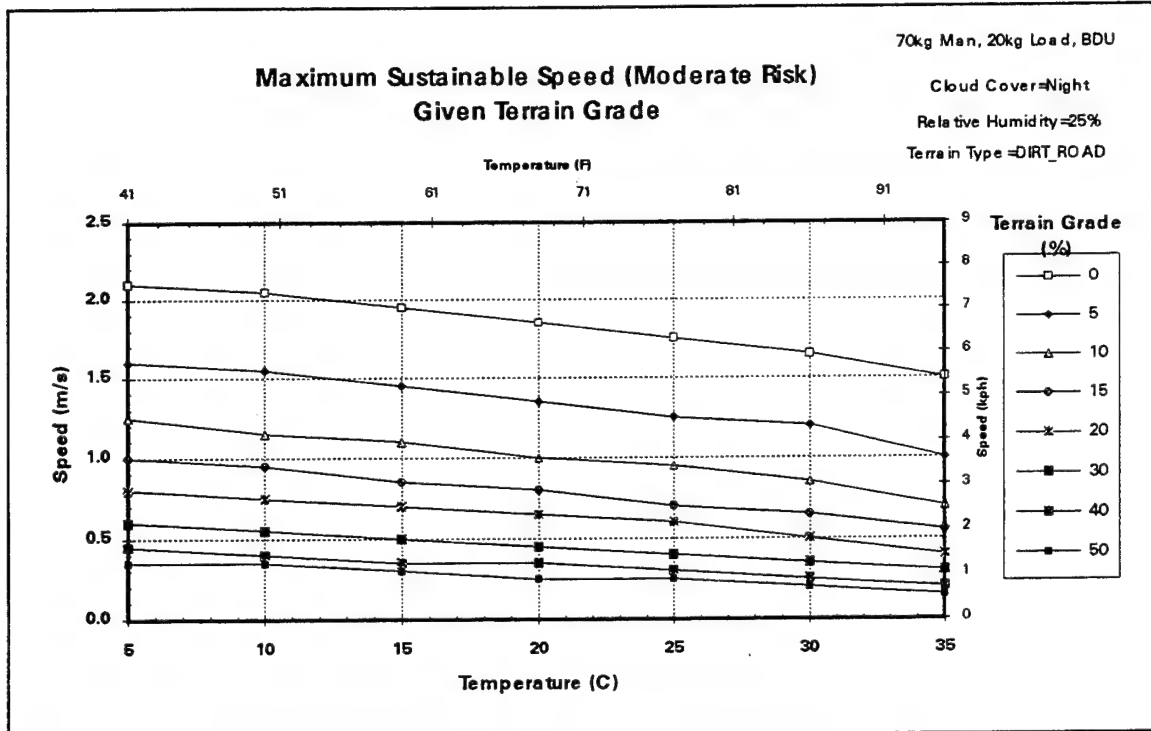


Figure C-13. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Night, 25% Relative Humidity.

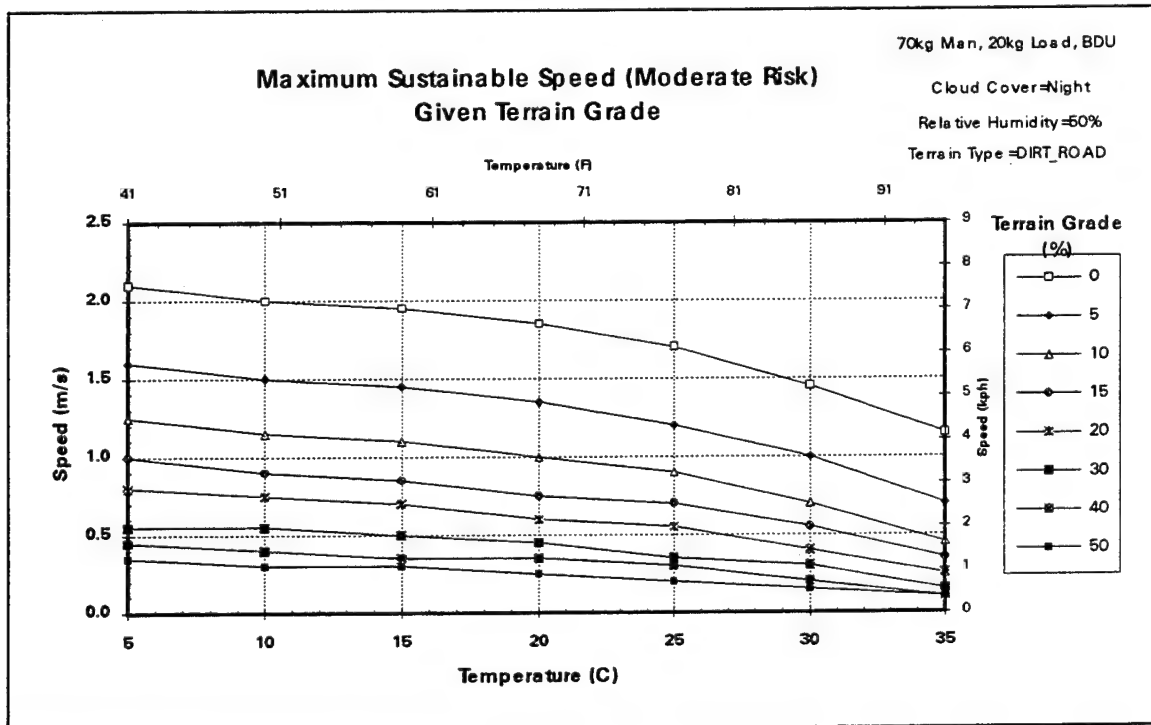


Figure C-14. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Night, 50% Relative Humidity.

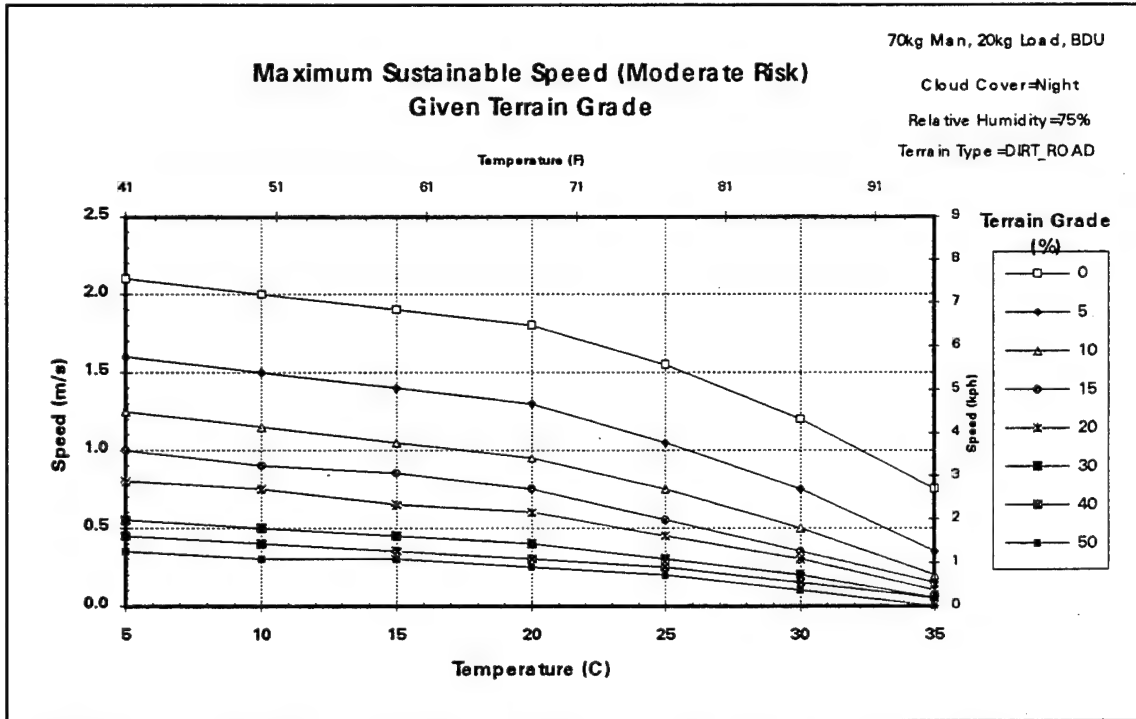


Figure C-15. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Night, 75% Relative Humidity.

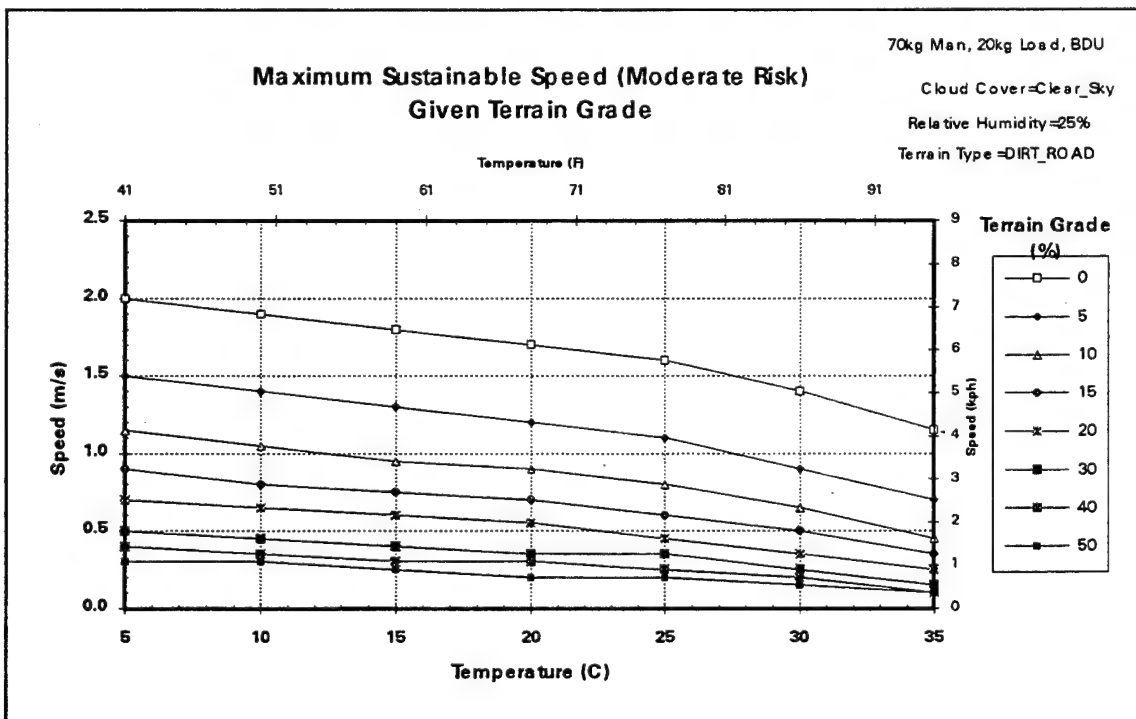


Figure C-16. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Clear Sky, 25% Relative Humidity.

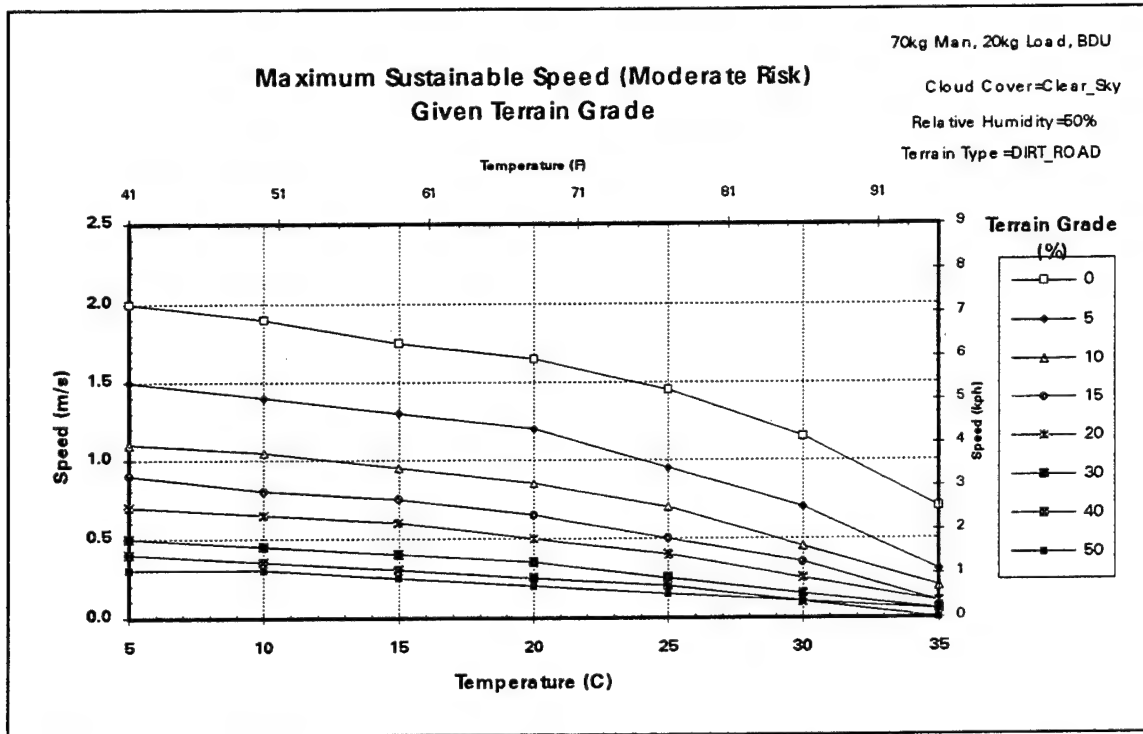


Figure C-17 Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Clear Sky, 50% Relative Humidity.

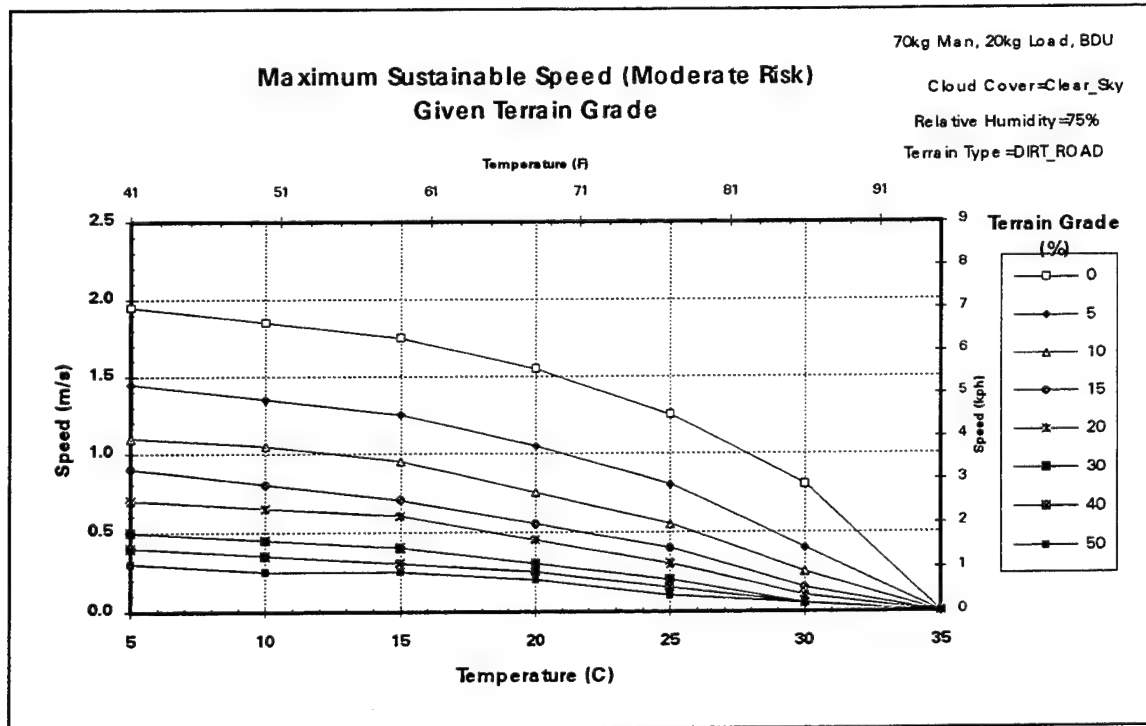


Figure C-18. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Dirt Road, Clear Sky, 75% Relative Humidity.

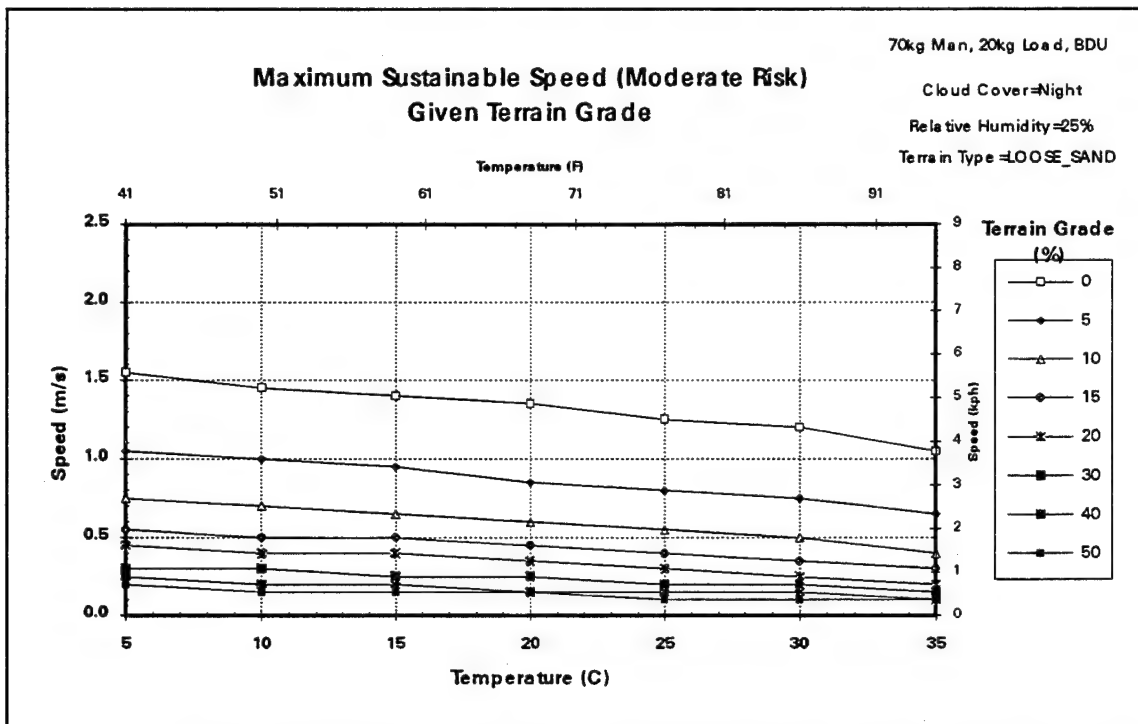


Figure C-19. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Night, 25% Relative Humidity

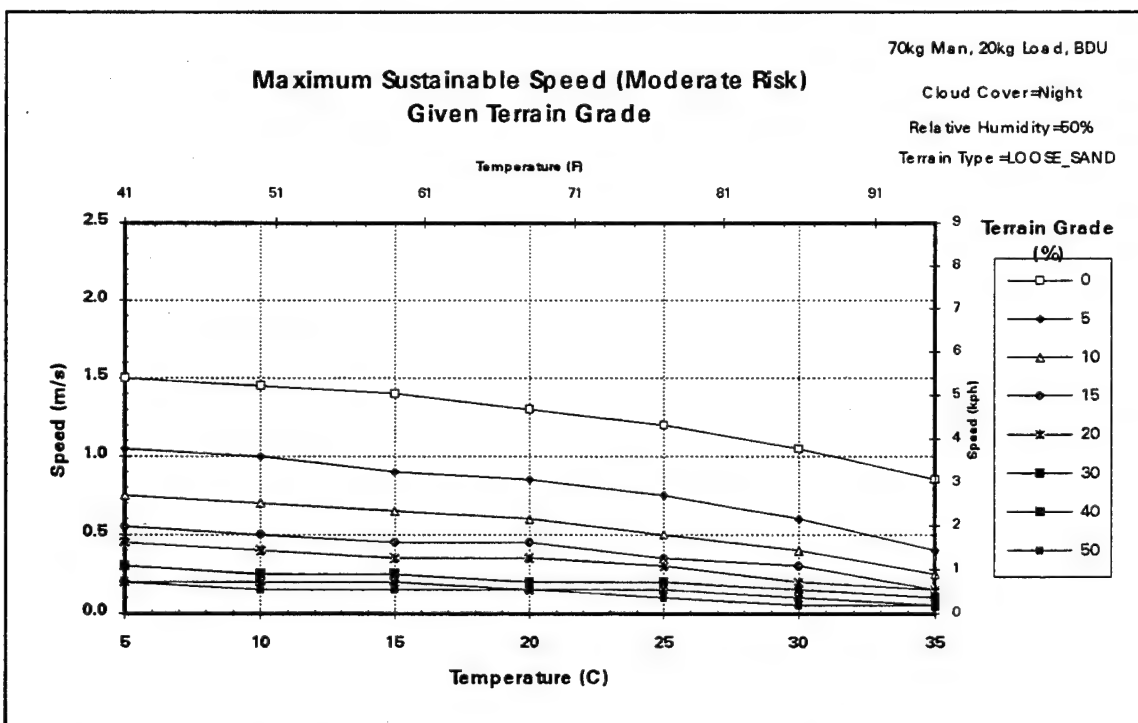


Figure C-20. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Night, 50% Relative Humidity.

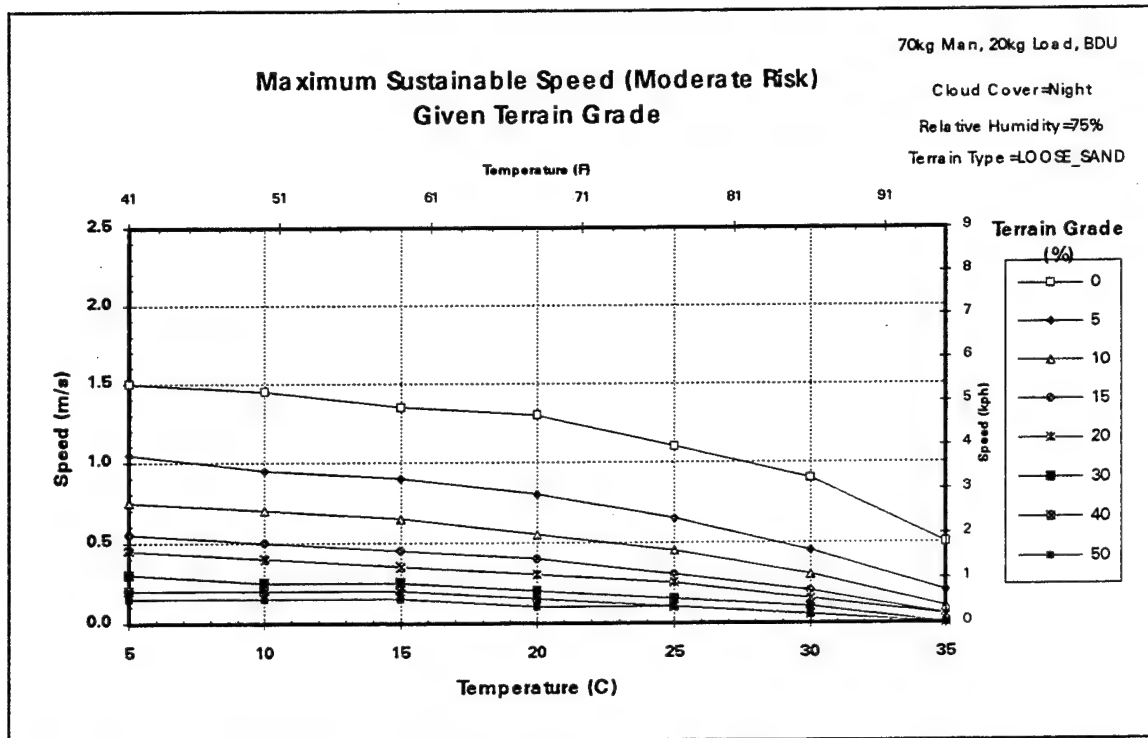


Figure C-21. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Night, 75% Relative Humidity.

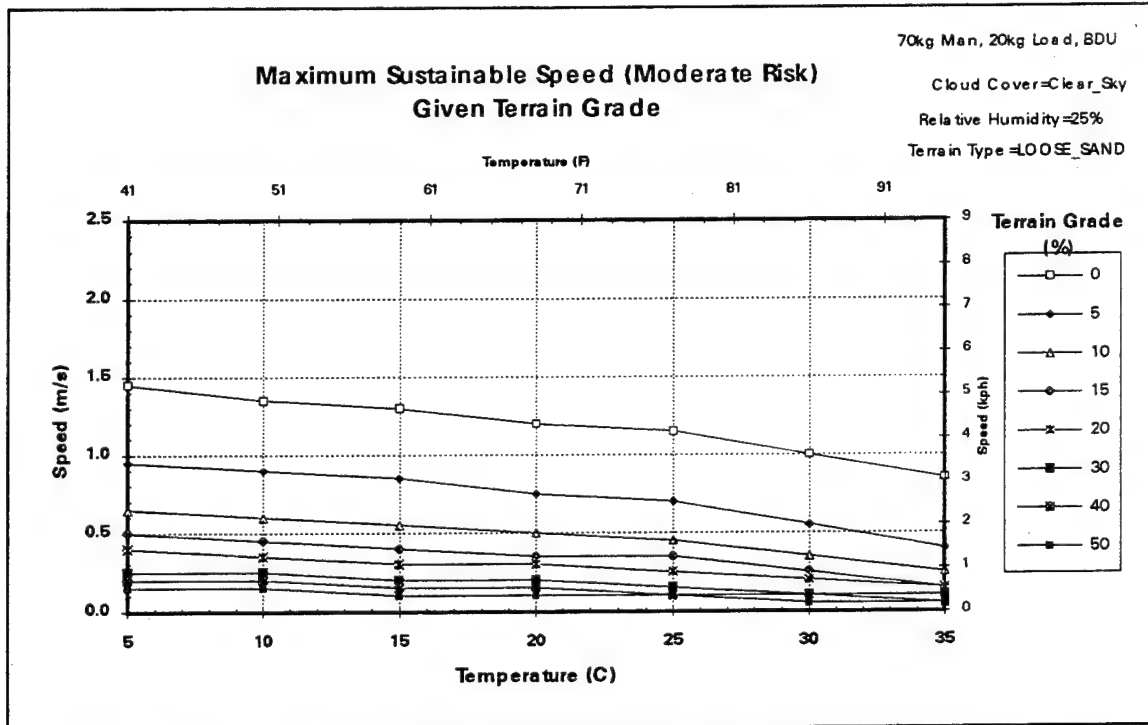


Figure C-22. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Clear Sky, 25% Relative Humidity.

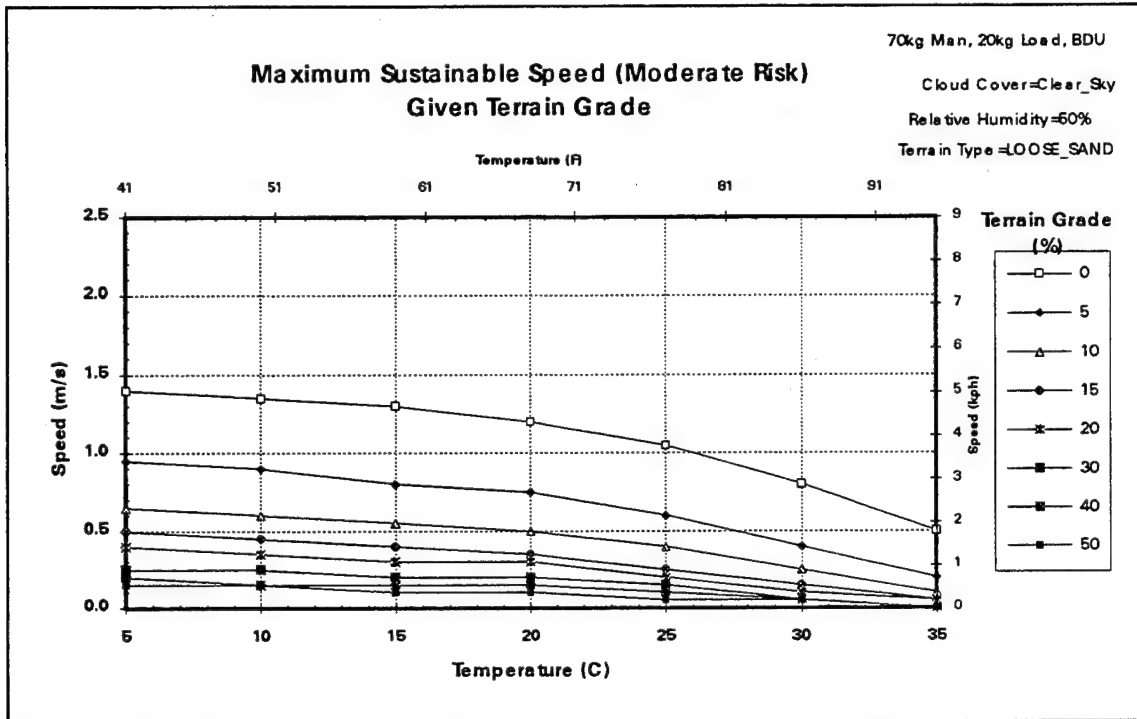


Figure C-23. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Clear Sky, 50% Relative Humidity.

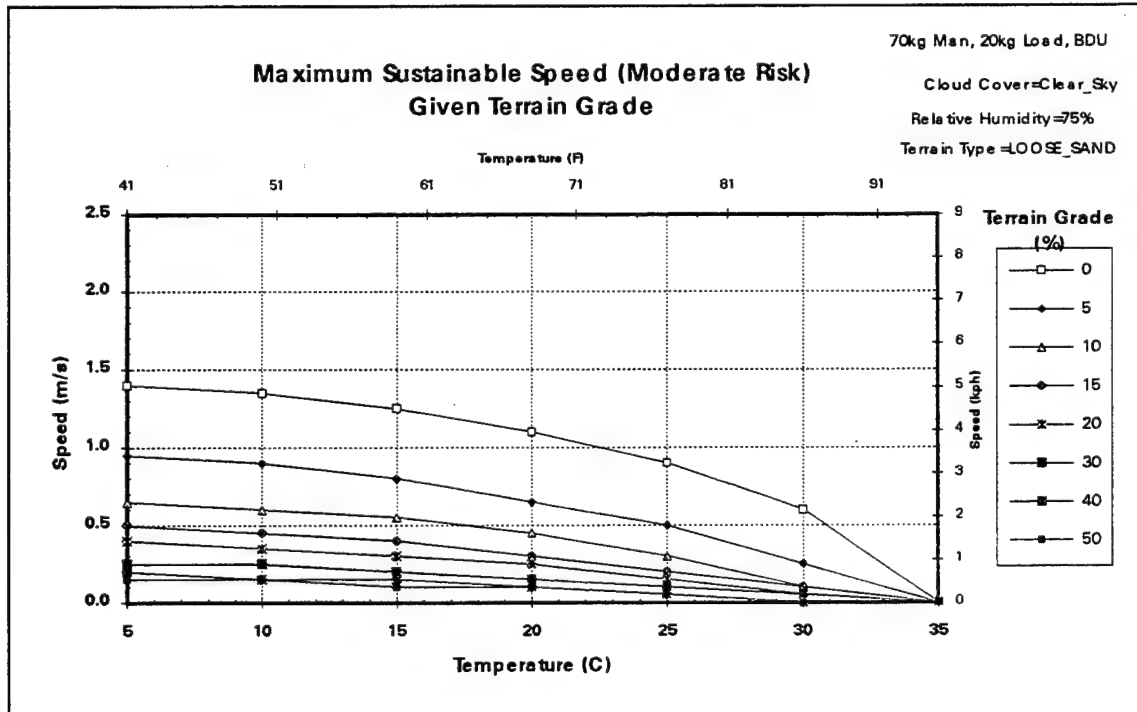


Figure C-24. Maximum Sustainable Speed By Temperature Given Terrain Grade, Moderate Risk, Loose Sand, Clear Sky, 75% Relative Humidity.

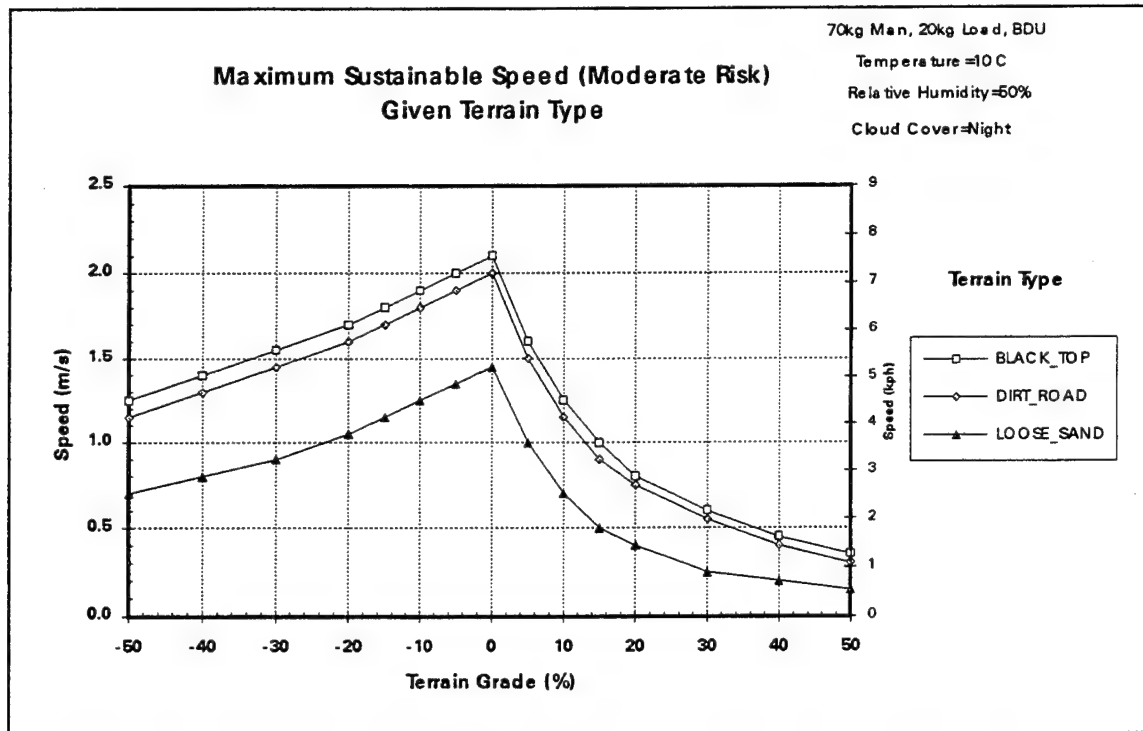


Figure C-25. Maximum Sustainable Speed By Terrain Grade Given Type, 10 °C, 50% Relative Humidity, Night.

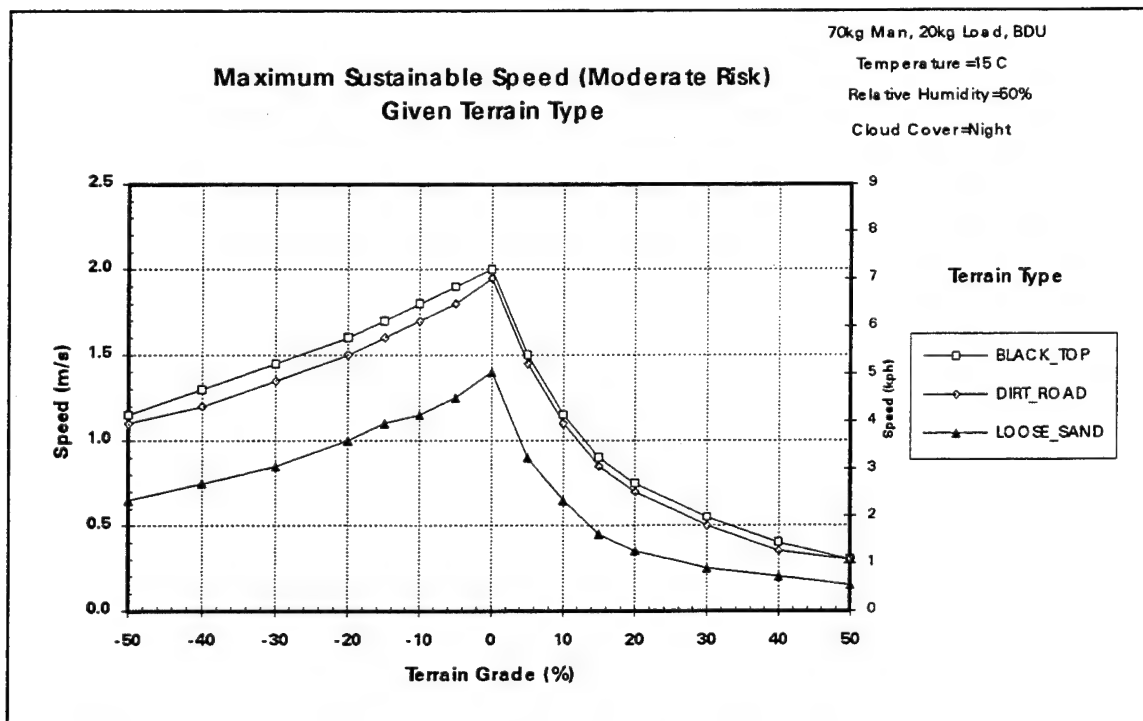


Figure C-26. Maximum Sustainable Speed By Terrain Grade Given Type, 15 °C, 50% Relative Humidity, Night.

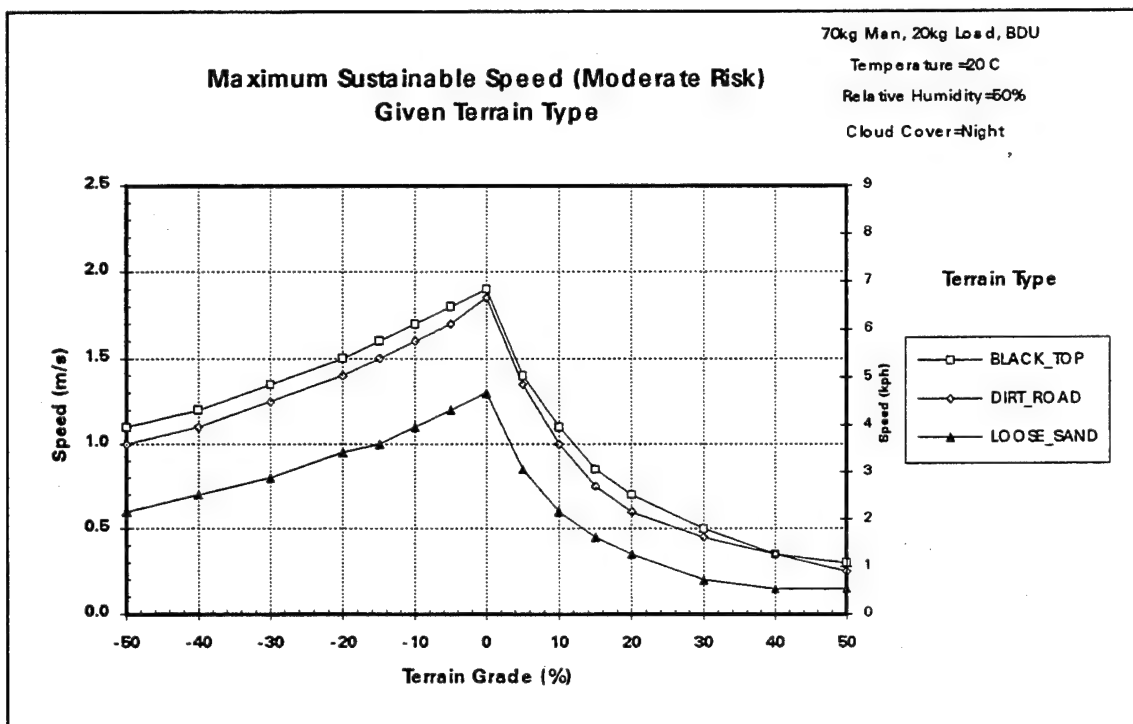


Figure C-27. Maximum Sustainable Speed By Terrain Grade Given Type, 20 °C, 50% Relative Humidity, Night.

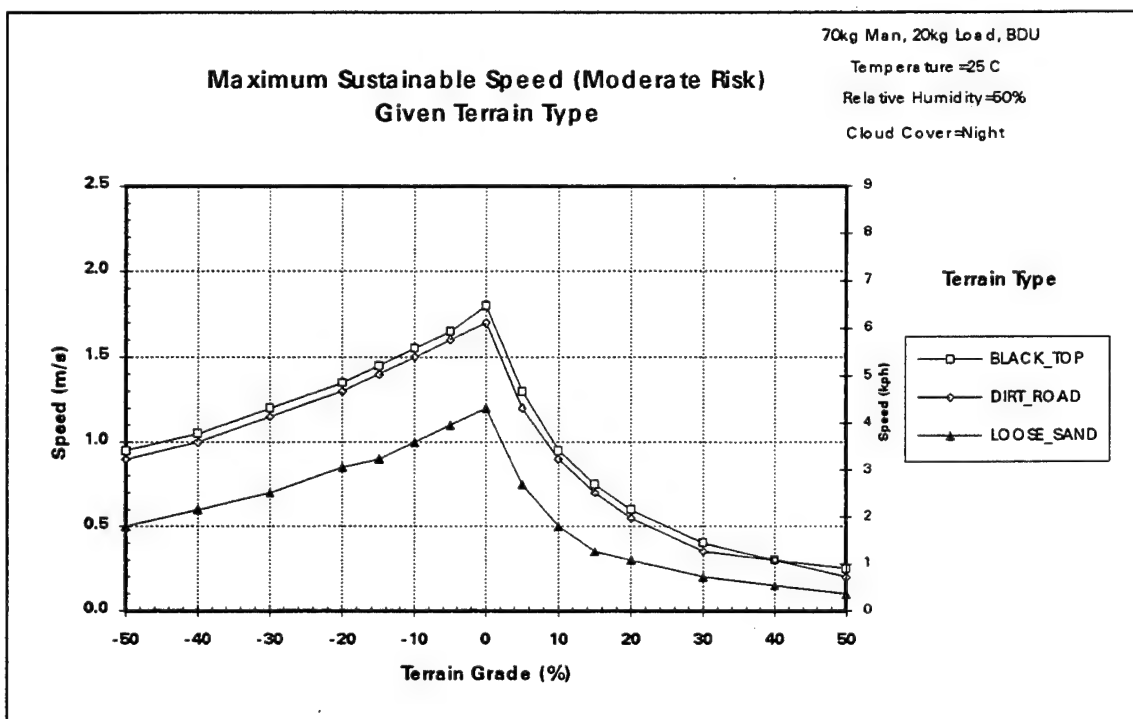


Figure C-28. Maximum Sustainable Speed By Terrain Grade Given Type, 25 °C, 50% Relative Humidity, Night

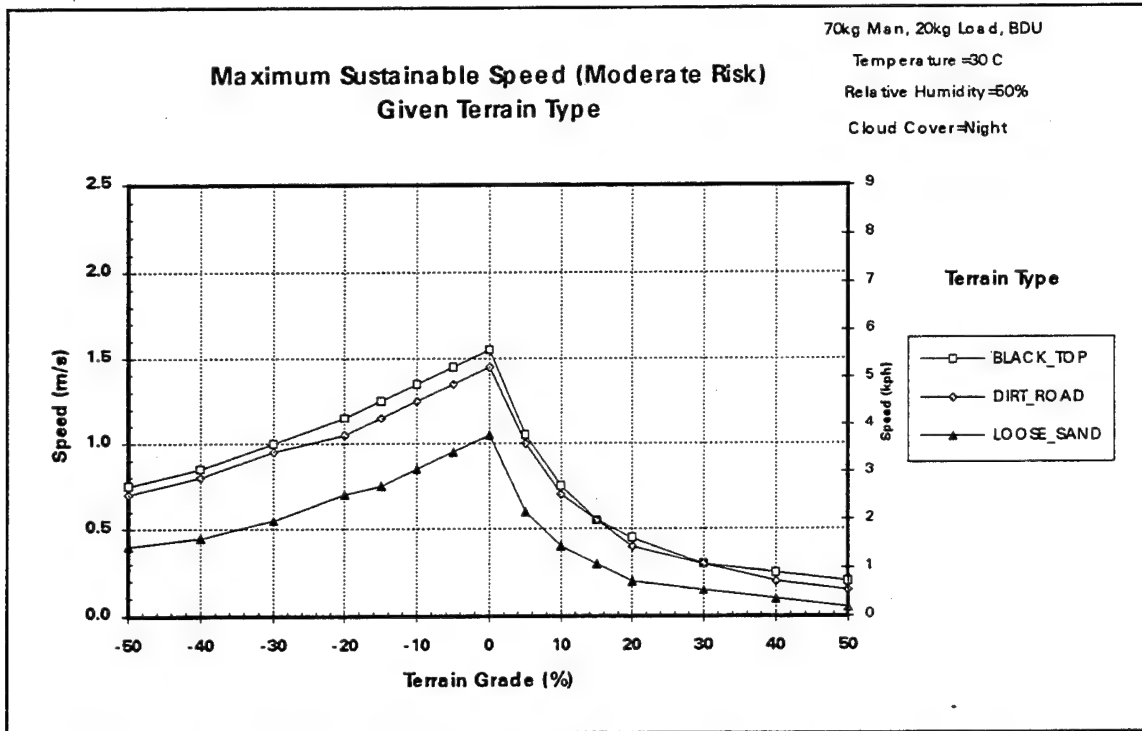


Figure C-29. Maximum Sustainable Speed By Terrain Grade Given Type, 30 °C, 50% Relative Humidity, Night.

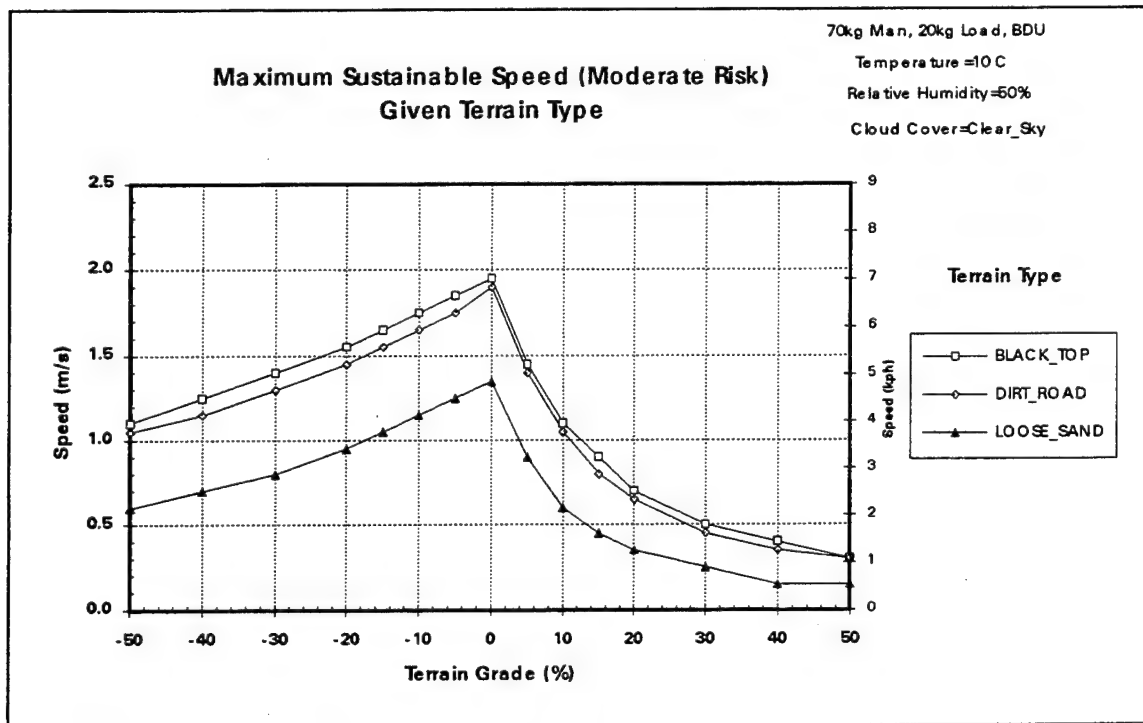


Figure C-30. Maximum Sustainable Speed By Terrain Grade Given Type, 10 °C, 50% Relative Humidity, Clear Sky.

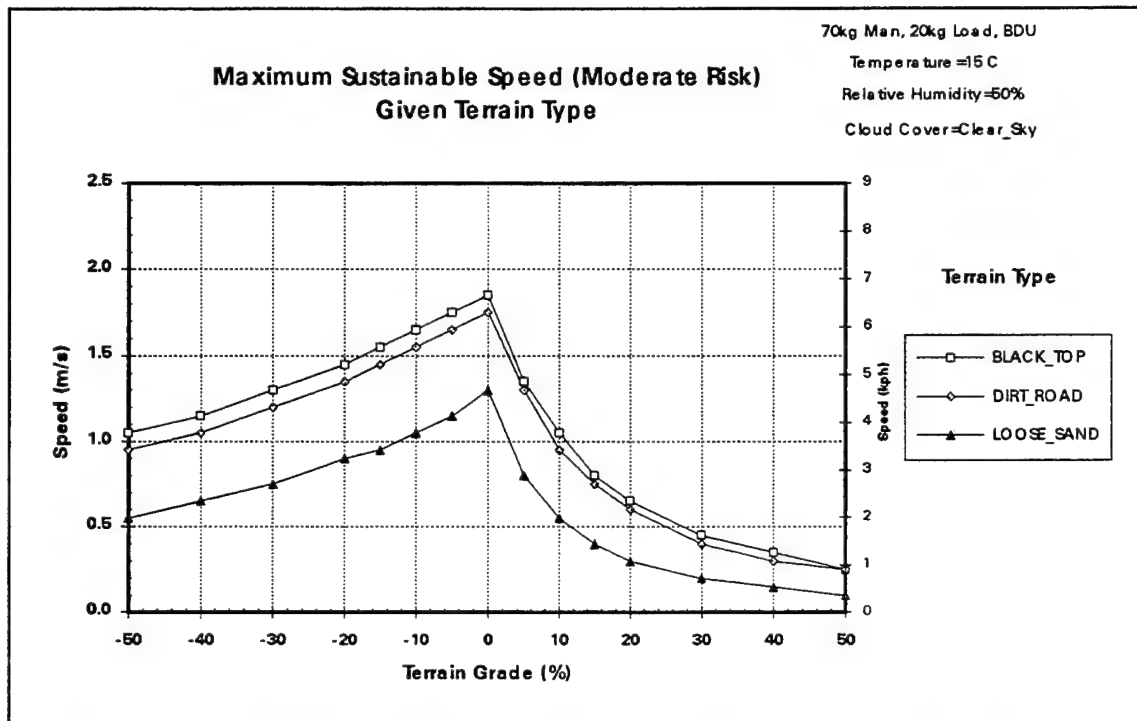


Figure C-31. Maximum Sustainable Speed By Terrain Grade Given Type, 15 °C, 50% Relative Humidity, Clear Sky.

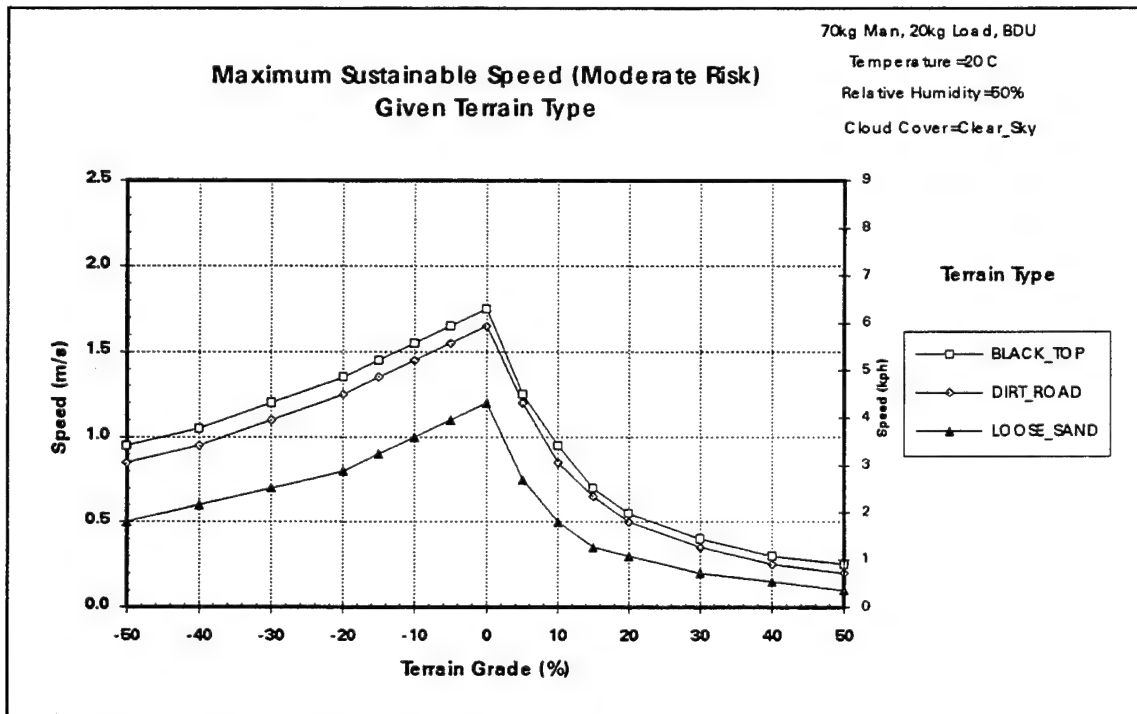


Figure C-32. Maximum Sustainable Speed By Terrain Grade Given Type, 20 °C, 50% Relative Humidity, Clear Sky.

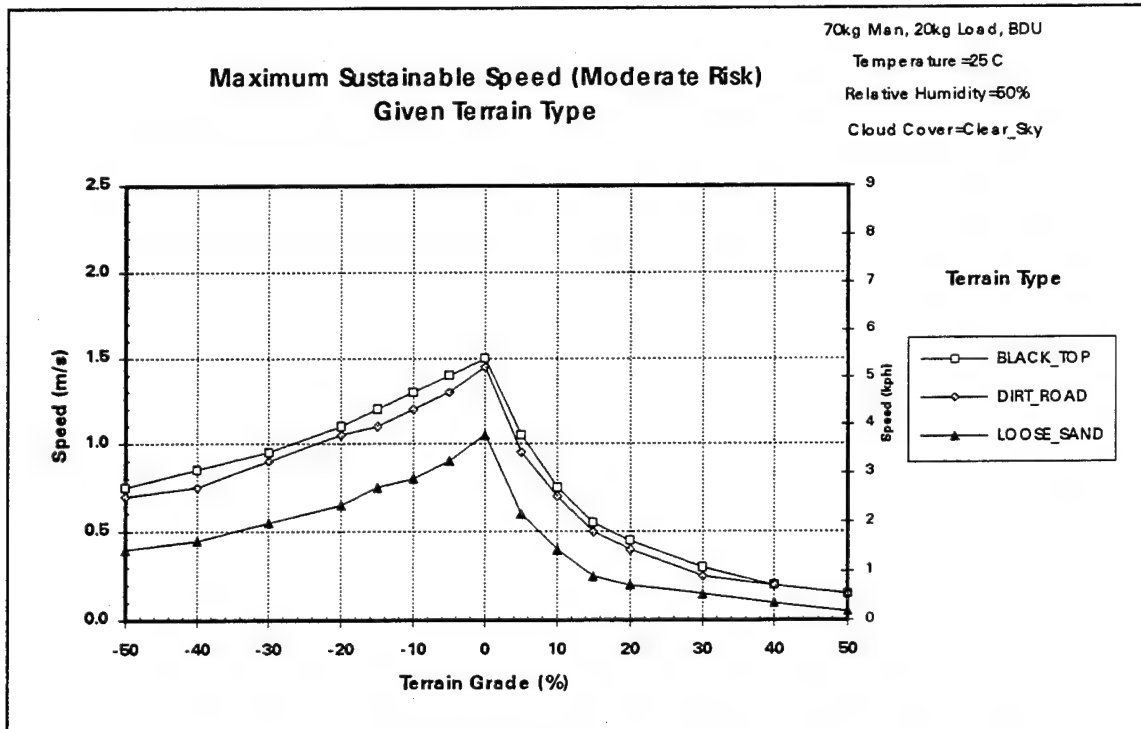


Figure C-33. Maximum Sustainable Speed By Terrain Grade Given Type, 25 °C, 50% Relative Humidity, Clear Sky.

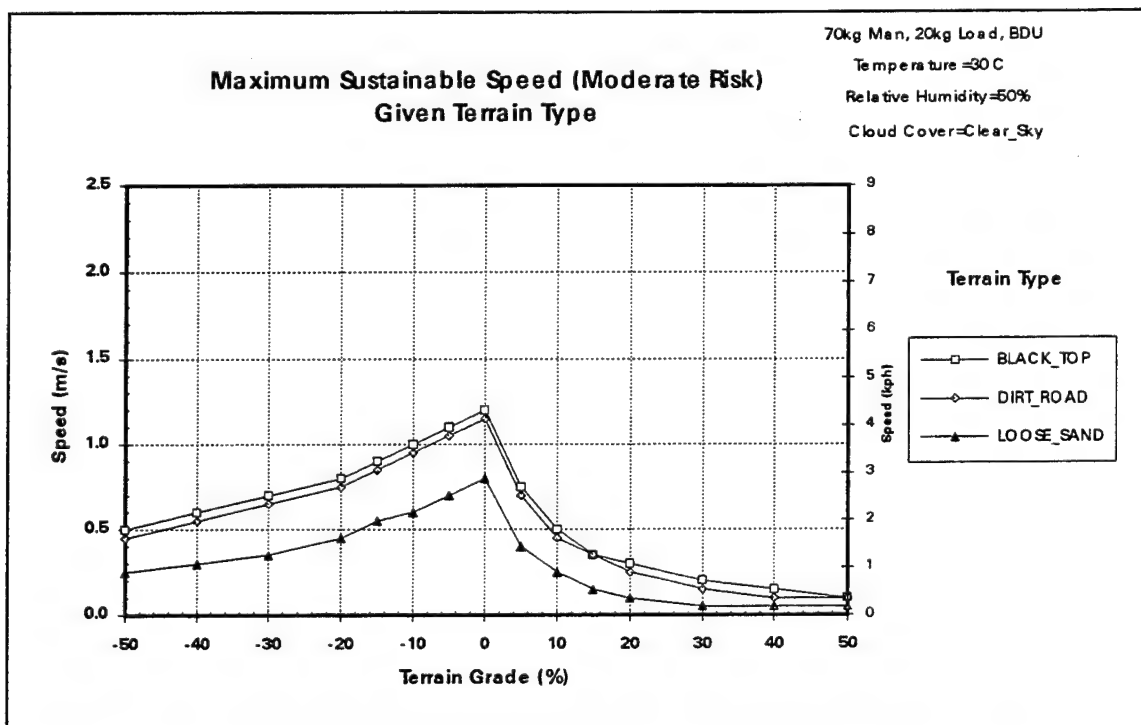


Figure C-34. Maximum Sustainable Speed By Terrain Grade Given Type, 30 °C, 50% Relative Humidity, Clear Sky.

Appendix D

Maximum Sustainable Speed Tables, Clear Sky

Table D-1. Maximum Sustainable Speed, Clear Sky, 5% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	5	5	41	BLACK_TOP	-50	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Clear_Sky	5	5	41	BLACK_TOP	-40	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Clear_Sky	5	5	41	BLACK_TOP	-30	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	5	5	41	BLACK_TOP	-20	1.40	1.70	2.10	5.0	6.1	7.6	3.1	3.8	4.7
Clear_Sky	5	5	41	BLACK_TOP	-15	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Clear_Sky	5	5	41	BLACK_TOP	-10	1.60	1.85	2.30	5.8	6.7	8.3	3.6	4.1	5.2
Clear_Sky	5	5	41	BLACK_TOP	-5	1.70	2.00	2.40	6.1	7.2	8.6	3.8	4.5	5.4
Clear_Sky	5	5	41	BLACK_TOP	0	1.80	2.10	2.50	6.5	7.6	9.0	4.0	4.7	5.6
Clear_Sky	5	5	41	BLACK_TOP	5	1.30	1.60	2.00	4.7	5.8	7.2	2.9	3.6	4.5
Clear_Sky	5	5	41	BLACK_TOP	10	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Clear_Sky	5	5	41	BLACK_TOP	15	0.75	0.95	1.30	2.7	3.4	4.7	1.7	2.1	2.9
Clear_Sky	5	5	41	BLACK_TOP	20	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Clear_Sky	5	5	41	BLACK_TOP	30	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Clear_Sky	5	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	5	5	41	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	5	5	41	DIRT_ROAD	-50	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Clear_Sky	5	5	41	DIRT_ROAD	-40	1.05	1.25	1.65	3.8	4.5	5.9	2.4	2.8	3.7
Clear_Sky	5	5	41	DIRT_ROAD	-30	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Clear_Sky	5	5	41	DIRT_ROAD	-20	1.30	1.60	2.00	4.7	5.8	7.2	2.9	3.6	4.5
Clear_Sky	5	5	41	DIRT_ROAD	-15	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Clear_Sky	5	5	41	DIRT_ROAD	-10	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Clear_Sky	5	5	41	DIRT_ROAD	-5	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Clear_Sky	5	5	41	DIRT_ROAD	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Clear_Sky	5	5	41	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	5	5	41	DIRT_ROAD	10	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Clear_Sky	5	5	41	DIRT_ROAD	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Clear_Sky	5	5	41	DIRT_ROAD	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Clear_Sky	5	5	41	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Clear_Sky	5	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	5	5	41	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	5	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Clear_Sky	5	5	41	LOOSE_SAND	-40	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Clear_Sky	5	5	41	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Clear_Sky	5	5	41	LOOSE_SAND	-20	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Clear_Sky	5	5	41	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Clear_Sky	5	5	41	LOOSE_SAND	-10	1.05	1.20	1.50	3.8	4.3	5.4	2.4	2.7	3.4
Clear_Sky	5	5	41	LOOSE_SAND	-5	1.15	1.30	1.60	4.1	4.7	5.8	2.6	2.9	3.6
Clear_Sky	5	5	41	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Clear_Sky	5	5	41	LOOSE_SAND	5	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Clear_Sky	5	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Clear_Sky	5	5	41	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	5	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	5	5	41	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	5	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	5	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table D-2. Maximum Sustainable Speed, Clear Sky, 5% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	5	10	50	BLACK_TOP	-50	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Clear_Sky	5	10	50	BLACK_TOP	-40	1.00	1.25	1.65	3.6	4.5	5.9	2.2	2.8	3.7
Clear_Sky	5	10	50	BLACK_TOP	-30	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Clear_Sky	5	10	50	BLACK_TOP	-20	1.30	1.60	2.00	4.7	5.8	7.2	2.9	3.6	4.5
Clear_Sky	5	10	50	BLACK_TOP	-15	1.40	1.70	2.10	5.0	6.1	7.6	3.1	3.8	4.7
Clear_Sky	5	10	50	BLACK_TOP	-10	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Clear_Sky	5	10	50	BLACK_TOP	-5	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Clear_Sky	5	10	50	BLACK_TOP	0	1.70	2.00	2.40	6.1	7.2	8.6	3.8	4.5	5.4
Clear_Sky	5	10	50	BLACK_TOP	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	5	10	50	BLACK_TOP	10	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Clear_Sky	5	10	50	BLACK_TOP	15	0.70	0.90	1.25	2.5	3.2	4.5	1.6	2.0	2.8
Clear_Sky	5	10	50	BLACK_TOP	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Clear_Sky	5	10	50	BLACK_TOP	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Clear_Sky	5	10	50	BLACK_TOP	40	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Clear_Sky	5	10	50	BLACK_TOP	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	5	10	50	DIRT_ROAD	-50	0.85	1.05	1.40	3.1	3.8	5.0	1.9	2.4	3.1
Clear_Sky	5	10	50	DIRT_ROAD	-40	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Clear_Sky	5	10	50	DIRT_ROAD	-30	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Clear_Sky	5	10	50	DIRT_ROAD	-20	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	5	10	50	DIRT_ROAD	-15	1.30	1.60	2.00	4.7	5.8	7.2	2.9	3.6	4.5
Clear_Sky	5	10	50	DIRT_ROAD	-10	1.40	1.70	2.10	5.0	6.1	7.6	3.1	3.8	4.7
Clear_Sky	5	10	50	DIRT_ROAD	-5	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Clear_Sky	5	10	50	DIRT_ROAD	0	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Clear_Sky	5	10	50	DIRT_ROAD	5	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Clear_Sky	5	10	50	DIRT_ROAD	10	0.85	1.05	1.40	3.1	3.8	5.0	1.9	2.4	3.1
Clear_Sky	5	10	50	DIRT_ROAD	15	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Clear_Sky	5	10	50	DIRT_ROAD	20	0.50	0.65	0.95	1.8	2.3	3.4	1.1	1.5	2.1
Clear_Sky	5	10	50	DIRT_ROAD	30	0.35	0.45	0.70	1.3	1.6	2.5	0.8	1.0	1.6
Clear_Sky	5	10	50	DIRT_ROAD	40	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Clear_Sky	5	10	50	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	5	10	50	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	5	10	50	LOOSE_SAND	-40	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Clear_Sky	5	10	50	LOOSE_SAND	-30	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Clear_Sky	5	10	50	LOOSE_SAND	-20	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Clear_Sky	5	10	50	LOOSE_SAND	-15	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Clear_Sky	5	10	50	LOOSE_SAND	-10	0.95	1.15	1.45	3.4	4.1	5.2	2.1	2.6	3.2
Clear_Sky	5	10	50	LOOSE_SAND	-5	1.05	1.25	1.55	3.8	4.5	5.6	2.4	2.8	3.5
Clear_Sky	5	10	50	LOOSE_SAND	0	1.20	1.35	1.65	4.3	4.9	5.9	2.7	3.0	3.7
Clear_Sky	5	10	50	LOOSE_SAND	5	0.75	0.90	1.20	2.7	3.2	4.3	1.7	2.0	2.7
Clear_Sky	5	10	50	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	5	10	50	LOOSE_SAND	15	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	5	10	50	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	5	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	5	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	5	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table D-3. Maximum Sustainable Speed, Clear Sky, 5% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	5	15	59	BLACK_TOP	-50	0.80	1.05	1.40	2.9	3.8	5.0	1.8	2.4	3.1
Clear_Sky	5	15	59	BLACK_TOP	-40	0.90	1.20	1.55	3.2	4.3	5.6	2.0	2.7	3.5
Clear_Sky	5	15	59	BLACK_TOP	-30	1.05	1.30	1.70	3.8	4.7	6.1	2.4	2.9	3.8
Clear_Sky	5	15	59	BLACK_TOP	-20	1.20	1.50	1.85	4.3	5.4	6.7	2.7	3.4	4.1
Clear_Sky	5	15	59	BLACK_TOP	-15	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Clear_Sky	5	15	59	BLACK_TOP	-10	1.40	1.70	2.05	5.0	6.1	7.4	3.1	3.8	4.6
Clear_Sky	5	15	59	BLACK_TOP	-5	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Clear_Sky	5	15	59	BLACK_TOP	0	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Clear_Sky	5	15	59	BLACK_TOP	5	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Clear_Sky	5	15	59	BLACK_TOP	10	0.80	1.05	1.40	2.9	3.8	5.0	1.8	2.4	3.1
Clear_Sky	5	15	59	BLACK_TOP	15	0.60	0.80	1.15	2.2	2.9	4.1	1.3	1.8	2.6
Clear_Sky	5	15	59	BLACK_TOP	20	0.50	0.65	0.95	1.8	2.3	3.4	1.1	1.5	2.1
Clear_Sky	5	15	59	BLACK_TOP	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	5	15	59	BLACK_TOP	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	5	15	59	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	5	15	59	DIRT_ROAD	-50	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Clear_Sky	5	15	59	DIRT_ROAD	-40	0.85	1.10	1.45	3.1	4.0	5.2	1.9	2.5	3.2
Clear_Sky	5	15	59	DIRT_ROAD	-30	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Clear_Sky	5	15	59	DIRT_ROAD	-20	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Clear_Sky	5	15	59	DIRT_ROAD	-15	1.20	1.50	1.85	4.3	5.4	6.7	2.7	3.4	4.1
Clear_Sky	5	15	59	DIRT_ROAD	-10	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Clear_Sky	5	15	59	DIRT_ROAD	-5	1.40	1.70	2.05	5.0	6.1	7.4	3.1	3.8	4.6
Clear_Sky	5	15	59	DIRT_ROAD	0	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Clear_Sky	5	15	59	DIRT_ROAD	5	1.05	1.30	1.70	3.8	4.7	6.1	2.4	2.9	3.8
Clear_Sky	5	15	59	DIRT_ROAD	10	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Clear_Sky	5	15	59	DIRT_ROAD	15	0.55	0.75	1.05	2.0	2.7	3.8	1.2	1.7	2.4
Clear_Sky	5	15	59	DIRT_ROAD	20	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Clear_Sky	5	15	59	DIRT_ROAD	30	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Clear_Sky	5	15	59	DIRT_ROAD	40	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	5	15	59	DIRT_ROAD	50	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	5	15	59	LOOSE_SAND	-50	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Clear_Sky	5	15	59	LOOSE_SAND	-40	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Clear_Sky	5	15	59	LOOSE_SAND	-30	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Clear_Sky	5	15	59	LOOSE_SAND	-20	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Clear_Sky	5	15	59	LOOSE_SAND	-15	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Clear_Sky	5	15	59	LOOSE_SAND	-10	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Clear_Sky	5	15	59	LOOSE_SAND	-5	1.00	1.20	1.45	3.6	4.3	5.2	2.2	2.7	3.2
Clear_Sky	5	15	59	LOOSE_SAND	0	1.10	1.30	1.55	4.0	4.7	5.6	2.5	2.9	3.5
Clear_Sky	5	15	59	LOOSE_SAND	5	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Clear_Sky	5	15	59	LOOSE_SAND	10	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Clear_Sky	5	15	59	LOOSE_SAND	15	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Clear_Sky	5	15	59	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	5	15	59	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	5	15	59	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	5	15	59	LOOSE_SAND	50	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4

Table D-4. Maximum Sustainable Speed, Clear Sky, 5% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	5	20	68	BLACK_TOP	-50	0.75	0.95	1.30	2.7	3.4	4.7	1.7	2.1	2.9
Clear_Sky	5	20	68	BLACK_TOP	-40	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Clear_Sky	5	20	68	BLACK_TOP	-30	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Clear_Sky	5	20	68	BLACK_TOP	-20	1.10	1.40	1.75	4.0	5.0	6.3	2.5	3.1	3.9
Clear_Sky	5	20	68	BLACK_TOP	-15	1.20	1.50	1.85	4.3	5.4	6.7	2.7	3.4	4.1
Clear_Sky	5	20	68	BLACK_TOP	-10	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Clear_Sky	5	20	68	BLACK_TOP	-5	1.40	1.70	2.05	5.0	6.1	7.4	3.1	3.8	4.6
Clear_Sky	5	20	68	BLACK_TOP	0	1.50	1.80	2.15	5.4	6.5	7.7	3.4	4.0	4.8
Clear_Sky	5	20	68	BLACK_TOP	5	1.00	1.30	1.65	3.6	4.7	5.9	2.2	2.9	3.7
Clear_Sky	5	20	68	BLACK_TOP	10	0.75	0.95	1.30	2.7	3.4	4.7	1.7	2.1	2.9
Clear_Sky	5	20	68	BLACK_TOP	15	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Clear_Sky	5	20	68	BLACK_TOP	20	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Clear_Sky	5	20	68	BLACK_TOP	30	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Clear_Sky	5	20	68	BLACK_TOP	40	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Clear_Sky	5	20	68	BLACK_TOP	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	5	20	68	DIRT_ROAD	-50	0.65	0.90	1.20	2.3	3.2	4.3	1.5	2.0	2.7
Clear_Sky	5	20	68	DIRT_ROAD	-40	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Clear_Sky	5	20	68	DIRT_ROAD	-30	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Clear_Sky	5	20	68	DIRT_ROAD	-20	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Clear_Sky	5	20	68	DIRT_ROAD	-15	1.10	1.40	1.75	4.0	5.0	6.3	2.5	3.1	3.9
Clear_Sky	5	20	68	DIRT_ROAD	-10	1.20	1.50	1.85	4.3	5.4	6.7	2.7	3.4	4.1
Clear_Sky	5	20	68	DIRT_ROAD	-5	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Clear_Sky	5	20	68	DIRT_ROAD	0	1.45	1.70	2.05	5.2	6.1	7.4	3.2	3.8	4.6
Clear_Sky	5	20	68	DIRT_ROAD	5	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Clear_Sky	5	20	68	DIRT_ROAD	10	0.65	0.90	1.20	2.3	3.2	4.3	1.5	2.0	2.7
Clear_Sky	5	20	68	DIRT_ROAD	15	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Clear_Sky	5	20	68	DIRT_ROAD	20	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Clear_Sky	5	20	68	DIRT_ROAD	30	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Clear_Sky	5	20	68	DIRT_ROAD	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	5	20	68	DIRT_ROAD	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	5	20	68	LOOSE_SAND	-50	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	5	20	68	LOOSE_SAND	-40	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Clear_Sky	5	20	68	LOOSE_SAND	-30	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Clear_Sky	5	20	68	LOOSE_SAND	-20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Clear_Sky	5	20	68	LOOSE_SAND	-15	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Clear_Sky	5	20	68	LOOSE_SAND	-10	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Clear_Sky	5	20	68	LOOSE_SAND	-5	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Clear_Sky	5	20	68	LOOSE_SAND	0	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Clear_Sky	5	20	68	LOOSE_SAND	5	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Clear_Sky	5	20	68	LOOSE_SAND	10	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	5	20	68	LOOSE_SAND	15	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Clear_Sky	5	20	68	LOOSE_SAND	20	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	5	20	68	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	5	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	5	20	68	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table D-5. Maximum Sustainable Speed, Clear Sky, 5% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	5	25	77	BLACK_TOP	-50	0.65	0.90	1.15	2.3	3.2	4.1	1.5	2.0	2.6
Clear_Sky	5	25	77	BLACK_TOP	-40	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Clear_Sky	5	25	77	BLACK_TOP	-30	0.85	1.15	1.40	3.1	4.1	5.0	1.9	2.6	3.1
Clear_Sky	5	25	77	BLACK_TOP	-20	1.00	1.30	1.60	3.6	4.7	5.8	2.2	2.9	3.6
Clear_Sky	5	25	77	BLACK_TOP	-15	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Clear_Sky	5	25	77	BLACK_TOP	-10	1.15	1.45	1.80	4.1	5.2	6.5	2.6	3.2	4.0
Clear_Sky	5	25	77	BLACK_TOP	-5	1.25	1.60	1.90	4.5	5.8	6.8	2.8	3.6	4.3
Clear_Sky	5	25	77	BLACK_TOP	0	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Clear_Sky	5	25	77	BLACK_TOP	5	0.90	1.20	1.50	3.2	4.3	5.4	2.0	2.7	3.4
Clear_Sky	5	25	77	BLACK_TOP	10	0.65	0.90	1.15	2.3	3.2	4.1	1.5	2.0	2.6
Clear_Sky	5	25	77	BLACK_TOP	15	0.45	0.65	0.90	1.6	2.3	3.2	1.0	1.5	2.0
Clear_Sky	5	25	77	BLACK_TOP	20	0.35	0.55	0.75	1.3	2.0	2.7	0.8	1.2	1.7
Clear_Sky	5	25	77	BLACK_TOP	30	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	5	25	77	BLACK_TOP	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	5	25	77	BLACK_TOP	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	5	25	77	DIRT_ROAD	-50	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Clear_Sky	5	25	77	DIRT_ROAD	-40	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Clear_Sky	5	25	77	DIRT_ROAD	-30	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Clear_Sky	5	25	77	DIRT_ROAD	-20	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Clear_Sky	5	25	77	DIRT_ROAD	-15	1.00	1.30	1.60	3.6	4.7	5.8	2.2	2.9	3.6
Clear_Sky	5	25	77	DIRT_ROAD	-10	1.10	1.40	1.70	4.0	5.0	6.1	2.5	3.1	3.8
Clear_Sky	5	25	77	DIRT_ROAD	-5	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Clear_Sky	5	25	77	DIRT_ROAD	0	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Clear_Sky	5	25	77	DIRT_ROAD	5	0.85	1.15	1.40	3.1	4.1	5.0	1.9	2.6	3.1
Clear_Sky	5	25	77	DIRT_ROAD	10	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Clear_Sky	5	25	77	DIRT_ROAD	15	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Clear_Sky	5	25	77	DIRT_ROAD	20	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	5	25	77	DIRT_ROAD	30	0.20	0.35	0.45	0.7	1.3	1.6	0.4	0.8	1.0
Clear_Sky	5	25	77	DIRT_ROAD	40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	5	25	77	DIRT_ROAD	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	5	25	77	LOOSE_SAND	-50	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	5	25	77	LOOSE_SAND	-40	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Clear_Sky	5	25	77	LOOSE_SAND	-30	0.45	0.65	0.85	1.6	2.3	3.1	1.0	1.5	1.9
Clear_Sky	5	25	77	LOOSE_SAND	-20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Clear_Sky	5	25	77	LOOSE_SAND	-15	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Clear_Sky	5	25	77	LOOSE_SAND	-10	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Clear_Sky	5	25	77	LOOSE_SAND	-5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Clear_Sky	5	25	77	LOOSE_SAND	0	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Clear_Sky	5	25	77	LOOSE_SAND	5	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Clear_Sky	5	25	77	LOOSE_SAND	10	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	5	25	77	LOOSE_SAND	15	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	5	25	77	LOOSE_SAND	20	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	5	25	77	LOOSE_SAND	30	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	5	25	77	LOOSE_SAND	40	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Clear_Sky	5	25	77	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table D-6. Maximum Sustainable Speed, Clear Sky, 5% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	5	30	86	BLACK_TOP	-50	0.55	0.80	1.00	2.0	2.9	3.6	1.2	1.8	2.2
Clear_Sky	5	30	86	BLACK_TOP	-40	0.65	0.90	1.15	2.3	3.2	4.1	1.5	2.0	2.6
Clear_Sky	5	30	86	BLACK_TOP	-30	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Clear_Sky	5	30	86	BLACK_TOP	-20	0.85	1.20	1.45	3.1	4.3	5.2	1.9	2.7	3.2
Clear_Sky	5	30	86	BLACK_TOP	-15	0.95	1.25	1.55	3.4	4.5	5.6	2.1	2.8	3.5
Clear_Sky	5	30	86	BLACK_TOP	-10	1.05	1.35	1.65	3.8	4.9	5.9	2.4	3.0	3.7
Clear_Sky	5	30	86	BLACK_TOP	-5	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Clear_Sky	5	30	86	BLACK_TOP	0	1.25	1.60	1.85	4.5	5.8	6.7	2.8	3.6	4.1
Clear_Sky	5	30	86	BLACK_TOP	5	0.80	1.10	1.35	2.9	4.0	4.9	1.8	2.5	3.0
Clear_Sky	5	30	86	BLACK_TOP	10	0.55	0.80	1.00	2.0	2.9	3.6	1.2	1.8	2.2
Clear_Sky	5	30	86	BLACK_TOP	15	0.40	0.60	0.80	1.4	2.2	2.9	0.9	1.3	1.8
Clear_Sky	5	30	86	BLACK_TOP	20	0.30	0.45	0.65	1.1	1.6	2.3	0.7	1.0	1.5
Clear_Sky	5	30	86	BLACK_TOP	30	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Clear_Sky	5	30	86	BLACK_TOP	40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	5	30	86	BLACK_TOP	50	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Clear_Sky	5	30	86	DIRT_ROAD	-50	0.50	0.75	0.95	1.8	2.7	3.4	1.1	1.7	2.1
Clear_Sky	5	30	86	DIRT_ROAD	-40	0.60	0.85	1.05	2.2	3.1	3.8	1.3	1.9	2.4
Clear_Sky	5	30	86	DIRT_ROAD	-30	0.70	0.95	1.20	2.5	3.4	4.3	1.6	2.1	2.7
Clear_Sky	5	30	86	DIRT_ROAD	-20	0.80	1.10	1.35	2.9	4.0	4.9	1.8	2.5	3.0
Clear_Sky	5	30	86	DIRT_ROAD	-15	0.90	1.20	1.45	3.2	4.3	5.2	2.0	2.7	3.2
Clear_Sky	5	30	86	DIRT_ROAD	-10	1.00	1.30	1.55	3.6	4.7	5.6	2.2	2.9	3.5
Clear_Sky	5	30	86	DIRT_ROAD	-5	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Clear_Sky	5	30	86	DIRT_ROAD	0	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Clear_Sky	5	30	86	DIRT_ROAD	5	0.75	1.05	1.25	2.7	3.8	4.5	1.7	2.4	2.8
Clear_Sky	5	30	86	DIRT_ROAD	10	0.50	0.75	0.95	1.8	2.7	3.4	1.1	1.7	2.1
Clear_Sky	5	30	86	DIRT_ROAD	15	0.35	0.55	0.75	1.3	2.0	2.7	0.8	1.2	1.7
Clear_Sky	5	30	86	DIRT_ROAD	20	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Clear_Sky	5	30	86	DIRT_ROAD	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	5	30	86	DIRT_ROAD	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	5	30	86	DIRT_ROAD	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	5	30	86	LOOSE_SAND	-50	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Clear_Sky	5	30	86	LOOSE_SAND	-40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	5	30	86	LOOSE_SAND	-30	0.40	0.60	0.75	1.4	2.2	2.7	0.9	1.3	1.7
Clear_Sky	5	30	86	LOOSE_SAND	-20	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Clear_Sky	5	30	86	LOOSE_SAND	-15	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Clear_Sky	5	30	86	LOOSE_SAND	-10	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Clear_Sky	5	30	86	LOOSE_SAND	-5	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Clear_Sky	5	30	86	LOOSE_SAND	0	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Clear_Sky	5	30	86	LOOSE_SAND	5	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Clear_Sky	5	30	86	LOOSE_SAND	10	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Clear_Sky	5	30	86	LOOSE_SAND	15	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	5	30	86	LOOSE_SAND	20	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	5	30	86	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	5	30	86	LOOSE_SAND	40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	5	30	86	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table D-7. Maximum Sustainable Speed, Clear Sky, 5% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	5	35	95	BLACK_TOP	-50	0.45	0.70	0.85	1.6	2.5	3.1	1.0	1.6	1.9
Clear_Sky	5	35	95	BLACK_TOP	-40	0.50	0.80	1.00	1.8	2.9	3.6	1.1	1.8	2.2
Clear_Sky	5	35	95	BLACK_TOP	-30	0.60	0.90	1.10	2.2	3.2	4.0	1.3	2.0	2.5
Clear_Sky	5	35	95	BLACK_TOP	-20	0.75	1.05	1.30	2.7	3.8	4.7	1.7	2.4	2.9
Clear_Sky	5	35	95	BLACK_TOP	-15	0.80	1.15	1.35	2.9	4.1	4.9	1.8	2.6	3.0
Clear_Sky	5	35	95	BLACK_TOP	-10	0.90	1.25	1.45	3.2	4.5	5.2	2.0	2.8	3.2
Clear_Sky	5	35	95	BLACK_TOP	-5	1.00	1.35	1.55	3.6	4.9	5.6	2.2	3.0	3.5
Clear_Sky	5	35	95	BLACK_TOP	0	1.10	1.45	1.70	4.0	5.2	6.1	2.5	3.2	3.8
Clear_Sky	5	35	95	BLACK_TOP	5	0.70	1.00	1.20	2.5	3.6	4.3	1.6	2.2	2.7
Clear_Sky	5	35	95	BLACK_TOP	10	0.45	0.70	0.85	1.6	2.5	3.1	1.0	1.6	1.9
Clear_Sky	5	35	95	BLACK_TOP	15	0.30	0.50	0.65	1.1	1.8	2.3	0.7	1.1	1.5
Clear_Sky	5	35	95	BLACK_TOP	20	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Clear_Sky	5	35	95	BLACK_TOP	30	0.15	0.30	0.35	0.5	1.1	1.3	0.3	0.7	0.8
Clear_Sky	5	35	95	BLACK_TOP	40	0.10	0.20	0.30	0.4	0.7	1.1	0.2	0.4	0.7
Clear_Sky	5	35	95	BLACK_TOP	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	5	35	95	DIRT_ROAD	-50	0.40	0.65	0.80	1.4	2.3	2.9	0.9	1.5	1.8
Clear_Sky	5	35	95	DIRT_ROAD	-40	0.50	0.75	0.90	1.8	2.7	3.2	1.1	1.7	2.0
Clear_Sky	5	35	95	DIRT_ROAD	-30	0.55	0.85	1.05	2.0	3.1	3.8	1.2	1.9	2.4
Clear_Sky	5	35	95	DIRT_ROAD	-20	0.70	1.00	1.20	2.5	3.6	4.3	1.6	2.2	2.7
Clear_Sky	5	35	95	DIRT_ROAD	-15	0.75	1.10	1.30	2.7	4.0	4.7	1.7	2.5	2.9
Clear_Sky	5	35	95	DIRT_ROAD	-10	0.85	1.20	1.40	3.1	4.3	5.0	1.9	2.7	3.1
Clear_Sky	5	35	95	DIRT_ROAD	-5	0.95	1.30	1.50	3.4	4.7	5.4	2.1	2.9	3.4
Clear_Sky	5	35	95	DIRT_ROAD	0	1.05	1.40	1.60	3.8	5.0	5.8	2.4	3.1	3.6
Clear_Sky	5	35	95	DIRT_ROAD	5	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Clear_Sky	5	35	95	DIRT_ROAD	10	0.40	0.65	0.80	1.4	2.3	2.9	0.9	1.5	1.8
Clear_Sky	5	35	95	DIRT_ROAD	15	0.30	0.50	0.60	1.1	1.8	2.2	0.7	1.1	1.3
Clear_Sky	5	35	95	DIRT_ROAD	20	0.20	0.35	0.50	0.7	1.3	1.8	0.4	0.8	1.1
Clear_Sky	5	35	95	DIRT_ROAD	30	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	5	35	95	DIRT_ROAD	40	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Clear_Sky	5	35	95	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	5	35	95	LOOSE_SAND	-50	0.20	0.35	0.45	0.7	1.3	1.6	0.4	0.8	1.0
Clear_Sky	5	35	95	LOOSE_SAND	-40	0.25	0.45	0.55	0.9	1.6	2.0	0.6	1.0	1.2
Clear_Sky	5	35	95	LOOSE_SAND	-30	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	5	35	95	LOOSE_SAND	-20	0.45	0.65	0.75	1.6	2.3	2.7	1.0	1.5	1.7
Clear_Sky	5	35	95	LOOSE_SAND	-15	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Clear_Sky	5	35	95	LOOSE_SAND	-10	0.55	0.80	0.95	2.0	2.9	3.4	1.2	1.8	2.1
Clear_Sky	5	35	95	LOOSE_SAND	-5	0.65	0.90	1.05	2.3	3.2	3.8	1.5	2.0	2.4
Clear_Sky	5	35	95	LOOSE_SAND	0	0.75	1.00	1.15	2.7	3.6	4.1	1.7	2.2	2.6
Clear_Sky	5	35	95	LOOSE_SAND	5	0.35	0.55	0.70	1.3	2.0	2.5	0.8	1.2	1.6
Clear_Sky	5	35	95	LOOSE_SAND	10	0.20	0.35	0.45	0.7	1.3	1.6	0.4	0.8	1.0
Clear_Sky	5	35	95	LOOSE_SAND	15	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	5	35	95	LOOSE_SAND	20	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Clear_Sky	5	35	95	LOOSE_SAND	30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	5	35	95	LOOSE_SAND	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	5	35	95	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table D-8. Maximum Sustainable Speed, Clear Sky, 25% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	25	5	41	BLACK_TOP	-50	1.00	1.20	1.60	3.6	4.3	5.8	2.2	2.7	3.6
Clear_Sky	25	5	41	BLACK_TOP	-40	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Clear_Sky	25	5	41	BLACK_TOP	-30	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	25	5	41	BLACK_TOP	-20	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Clear_Sky	25	5	41	BLACK_TOP	-15	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Clear_Sky	25	5	41	BLACK_TOP	-10	1.60	1.85	2.30	5.8	6.7	8.3	3.6	4.1	5.2
Clear_Sky	25	5	41	BLACK_TOP	-5	1.70	1.95	2.40	6.1	7.0	8.6	3.8	4.4	5.4
Clear_Sky	25	5	41	BLACK_TOP	0	1.80	2.10	2.50	6.5	7.6	9.0	4.0	4.7	5.6
Clear_Sky	25	5	41	BLACK_TOP	5	1.30	1.60	2.00	4.7	5.8	7.2	2.9	3.6	4.5
Clear_Sky	25	5	41	BLACK_TOP	10	1.00	1.20	1.60	3.6	4.3	5.8	2.2	2.7	3.6
Clear_Sky	25	5	41	BLACK_TOP	15	0.75	0.95	1.30	2.7	3.4	4.7	1.7	2.1	2.9
Clear_Sky	25	5	41	BLACK_TOP	20	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Clear_Sky	25	5	41	BLACK_TOP	30	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Clear_Sky	25	5	41	BLACK_TOP	40	0.30	0.45	0.65	1.1	1.6	2.3	0.7	1.0	1.5
Clear_Sky	25	5	41	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	25	5	41	DIRT_ROAD	-50	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Clear_Sky	25	5	41	DIRT_ROAD	-40	1.00	1.25	1.65	3.6	4.5	5.9	2.2	2.8	3.7
Clear_Sky	25	5	41	DIRT_ROAD	-30	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Clear_Sky	25	5	41	DIRT_ROAD	-20	1.30	1.55	2.00	4.7	5.6	7.2	2.9	3.5	4.5
Clear_Sky	25	5	41	DIRT_ROAD	-15	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Clear_Sky	25	5	41	DIRT_ROAD	-10	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Clear_Sky	25	5	41	DIRT_ROAD	-5	1.60	1.85	2.30	5.8	6.7	8.3	3.6	4.1	5.2
Clear_Sky	25	5	41	DIRT_ROAD	0	1.70	2.00	2.40	6.1	7.2	8.6	3.8	4.5	5.4
Clear_Sky	25	5	41	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	25	5	41	DIRT_ROAD	10	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Clear_Sky	25	5	41	DIRT_ROAD	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Clear_Sky	25	5	41	DIRT_ROAD	20	0.55	0.70	1.00	2.0	2.5	3.6	1.2	1.6	2.2
Clear_Sky	25	5	41	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Clear_Sky	25	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	25	5	41	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	25	5	41	LOOSE_SAND	-50	0.55	0.65	0.90	2.0	2.3	3.2	1.2	1.5	2.0
Clear_Sky	25	5	41	LOOSE_SAND	-40	0.60	0.75	1.05	2.2	2.7	3.8	1.3	1.7	2.4
Clear_Sky	25	5	41	LOOSE_SAND	-30	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Clear_Sky	25	5	41	LOOSE_SAND	-20	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Clear_Sky	25	5	41	LOOSE_SAND	-15	0.95	1.10	1.40	3.4	4.0	5.0	2.1	2.5	3.1
Clear_Sky	25	5	41	LOOSE_SAND	-10	1.05	1.20	1.50	3.8	4.3	5.4	2.4	2.7	3.4
Clear_Sky	25	5	41	LOOSE_SAND	-5	1.15	1.30	1.60	4.1	4.7	5.8	2.6	2.9	3.6
Clear_Sky	25	5	41	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Clear_Sky	25	5	41	LOOSE_SAND	5	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Clear_Sky	25	5	41	LOOSE_SAND	10	0.55	0.65	0.90	2.0	2.3	3.2	1.2	1.5	2.0
Clear_Sky	25	5	41	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	25	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	25	5	41	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	25	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	25	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table D-9. Maximum Sustainable Speed, Clear Sky, 25% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	25	10	50	BLACK_TOP	-50	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Clear_Sky	25	10	50	BLACK_TOP	-40	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Clear_Sky	25	10	50	BLACK_TOP	-30	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Clear_Sky	25	10	50	BLACK_TOP	-20	1.30	1.55	1.95	4.7	5.6	7.0	2.9	3.5	4.4
Clear_Sky	25	10	50	BLACK_TOP	-15	1.40	1.65	2.05	5.0	5.9	7.4	3.1	3.7	4.6
Clear_Sky	25	10	50	BLACK_TOP	-10	1.50	1.75	2.15	5.4	6.3	7.7	3.4	3.9	4.8
Clear_Sky	25	10	50	BLACK_TOP	-5	1.60	1.85	2.25	5.8	6.7	8.1	3.6	4.1	5.0
Clear_Sky	25	10	50	BLACK_TOP	0	1.70	2.00	2.35	6.1	7.2	8.5	3.8	4.5	5.3
Clear_Sky	25	10	50	BLACK_TOP	5	1.20	1.50	1.85	4.3	5.4	6.7	2.7	3.4	4.1
Clear_Sky	25	10	50	BLACK_TOP	10	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Clear_Sky	25	10	50	BLACK_TOP	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Clear_Sky	25	10	50	BLACK_TOP	20	0.55	0.70	1.00	2.0	2.5	3.6	1.2	1.6	2.2
Clear_Sky	25	10	50	BLACK_TOP	30	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	25	10	50	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	25	10	50	BLACK_TOP	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	25	10	50	DIRT_ROAD	-50	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Clear_Sky	25	10	50	DIRT_ROAD	-40	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Clear_Sky	25	10	50	DIRT_ROAD	-30	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Clear_Sky	25	10	50	DIRT_ROAD	-20	1.20	1.50	1.85	4.3	5.4	6.7	2.7	3.4	4.1
Clear_Sky	25	10	50	DIRT_ROAD	-15	1.30	1.55	1.95	4.7	5.6	7.0	2.9	3.5	4.4
Clear_Sky	25	10	50	DIRT_ROAD	-10	1.40	1.65	2.05	5.0	5.9	7.4	3.1	3.7	4.6
Clear_Sky	25	10	50	DIRT_ROAD	-5	1.50	1.80	2.15	5.4	6.5	7.7	3.4	4.0	4.8
Clear_Sky	25	10	50	DIRT_ROAD	0	1.60	1.90	2.25	5.8	6.8	8.1	3.6	4.3	5.0
Clear_Sky	25	10	50	DIRT_ROAD	5	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Clear_Sky	25	10	50	DIRT_ROAD	10	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Clear_Sky	25	10	50	DIRT_ROAD	15	0.65	0.80	1.10	2.3	2.9	4.0	1.5	1.8	2.5
Clear_Sky	25	10	50	DIRT_ROAD	20	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Clear_Sky	25	10	50	DIRT_ROAD	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	25	10	50	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	25	10	50	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	25	10	50	LOOSE_SAND	-50	0.50	0.60	0.85	1.8	2.2	3.1	1.1	1.3	1.9
Clear_Sky	25	10	50	LOOSE_SAND	-40	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Clear_Sky	25	10	50	LOOSE_SAND	-30	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Clear_Sky	25	10	50	LOOSE_SAND	-20	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Clear_Sky	25	10	50	LOOSE_SAND	-15	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Clear_Sky	25	10	50	LOOSE_SAND	-10	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Clear_Sky	25	10	50	LOOSE_SAND	-5	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Clear_Sky	25	10	50	LOOSE_SAND	0	1.15	1.35	1.65	4.1	4.9	5.9	2.6	3.0	3.7
Clear_Sky	25	10	50	LOOSE_SAND	5	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Clear_Sky	25	10	50	LOOSE_SAND	10	0.50	0.60	0.85	1.8	2.2	3.1	1.1	1.3	1.9
Clear_Sky	25	10	50	LOOSE_SAND	15	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	25	10	50	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	25	10	50	LOOSE_SAND	30	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	25	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	25	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table D-10. Maximum Sustainable Speed, Clear Sky, 25% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	25	15	59	BLACK_TOP	-50	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Clear_Sky	25	15	59	BLACK_TOP	-40	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Clear_Sky	25	15	59	BLACK_TOP	-30	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Clear_Sky	25	15	59	BLACK_TOP	-20	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Clear_Sky	25	15	59	BLACK_TOP	-15	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Clear_Sky	25	15	59	BLACK_TOP	-10	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Clear_Sky	25	15	59	BLACK_TOP	-5	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Clear_Sky	25	15	59	BLACK_TOP	0	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Clear_Sky	25	15	59	BLACK_TOP	5	1.10	1.40	1.70	4.0	5.0	6.1	2.5	3.1	3.8
Clear_Sky	25	15	59	BLACK_TOP	10	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Clear_Sky	25	15	59	BLACK_TOP	15	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Clear_Sky	25	15	59	BLACK_TOP	20	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Clear_Sky	25	15	59	BLACK_TOP	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	25	15	59	BLACK_TOP	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	25	15	59	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	25	15	59	DIRT_ROAD	-50	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Clear_Sky	25	15	59	DIRT_ROAD	-40	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Clear_Sky	25	15	59	DIRT_ROAD	-30	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Clear_Sky	25	15	59	DIRT_ROAD	-20	1.10	1.40	1.70	4.0	5.0	6.1	2.5	3.1	3.8
Clear_Sky	25	15	59	DIRT_ROAD	-15	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Clear_Sky	25	15	59	DIRT_ROAD	-10	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Clear_Sky	25	15	59	DIRT_ROAD	-5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Clear_Sky	25	15	59	DIRT_ROAD	0	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Clear_Sky	25	15	59	DIRT_ROAD	5	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Clear_Sky	25	15	59	DIRT_ROAD	10	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Clear_Sky	25	15	59	DIRT_ROAD	15	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Clear_Sky	25	15	59	DIRT_ROAD	20	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Clear_Sky	25	15	59	DIRT_ROAD	30	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Clear_Sky	25	15	59	DIRT_ROAD	40	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Clear_Sky	25	15	59	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	25	15	59	LOOSE_SAND	-50	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Clear_Sky	25	15	59	LOOSE_SAND	-40	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	25	15	59	LOOSE_SAND	-30	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Clear_Sky	25	15	59	LOOSE_SAND	-20	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Clear_Sky	25	15	59	LOOSE_SAND	-15	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Clear_Sky	25	15	59	LOOSE_SAND	-10	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Clear_Sky	25	15	59	LOOSE_SAND	-5	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Clear_Sky	25	15	59	LOOSE_SAND	0	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Clear_Sky	25	15	59	LOOSE_SAND	5	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Clear_Sky	25	15	59	LOOSE_SAND	10	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Clear_Sky	25	15	59	LOOSE_SAND	15	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	25	15	59	LOOSE_SAND	20	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	25	15	59	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	25	15	59	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	25	15	59	LOOSE_SAND	50	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4

Table D-11. Maximum Sustainable Speed, Clear Sky, 25% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	25	20	68	BLACK_TOP	-50	0.70	0.95	1.20	2.5	3.4	4.3	1.6	2.1	2.7
Clear_Sky	25	20	68	BLACK_TOP	-40	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Clear_Sky	25	20	68	BLACK_TOP	-30	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Clear_Sky	25	20	68	BLACK_TOP	-20	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Clear_Sky	25	20	68	BLACK_TOP	-15	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Clear_Sky	25	20	68	BLACK_TOP	-10	1.25	1.55	1.85	4.5	5.6	6.7	2.8	3.5	4.1
Clear_Sky	25	20	68	BLACK_TOP	-5	1.35	1.65	1.95	4.9	5.9	7.0	3.0	3.7	4.4
Clear_Sky	25	20	68	BLACK_TOP	0	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Clear_Sky	25	20	68	BLACK_TOP	5	1.00	1.30	1.55	3.6	4.7	5.6	2.2	2.9	3.5
Clear_Sky	25	20	68	BLACK_TOP	10	0.70	0.95	1.20	2.5	3.4	4.3	1.6	2.1	2.7
Clear_Sky	25	20	68	BLACK_TOP	15	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Clear_Sky	25	20	68	BLACK_TOP	20	0.40	0.60	0.75	1.4	2.2	2.7	0.9	1.3	1.7
Clear_Sky	25	20	68	BLACK_TOP	30	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	25	20	68	BLACK_TOP	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	25	20	68	BLACK_TOP	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	25	20	68	DIRT_ROAD	-50	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Clear_Sky	25	20	68	DIRT_ROAD	-40	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Clear_Sky	25	20	68	DIRT_ROAD	-30	0.85	1.15	1.35	3.1	4.1	4.9	1.9	2.6	3.0
Clear_Sky	25	20	68	DIRT_ROAD	-20	1.00	1.30	1.55	3.6	4.7	5.6	2.2	2.9	3.5
Clear_Sky	25	20	68	DIRT_ROAD	-15	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Clear_Sky	25	20	68	DIRT_ROAD	-10	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Clear_Sky	25	20	68	DIRT_ROAD	-5	1.30	1.60	1.85	4.7	5.8	6.7	2.9	3.6	4.1
Clear_Sky	25	20	68	DIRT_ROAD	0	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Clear_Sky	25	20	68	DIRT_ROAD	5	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Clear_Sky	25	20	68	DIRT_ROAD	10	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Clear_Sky	25	20	68	DIRT_ROAD	15	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Clear_Sky	25	20	68	DIRT_ROAD	20	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Clear_Sky	25	20	68	DIRT_ROAD	30	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	25	20	68	DIRT_ROAD	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	25	20	68	DIRT_ROAD	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	25	20	68	LOOSE_SAND	-50	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	25	20	68	LOOSE_SAND	-40	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Clear_Sky	25	20	68	LOOSE_SAND	-30	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Clear_Sky	25	20	68	LOOSE_SAND	-20	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Clear_Sky	25	20	68	LOOSE_SAND	-15	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Clear_Sky	25	20	68	LOOSE_SAND	-10	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Clear_Sky	25	20	68	LOOSE_SAND	-5	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Clear_Sky	25	20	68	LOOSE_SAND	0	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Clear_Sky	25	20	68	LOOSE_SAND	5	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Clear_Sky	25	20	68	LOOSE_SAND	10	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	25	20	68	LOOSE_SAND	15	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	25	20	68	LOOSE_SAND	20	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	25	20	68	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	25	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	25	20	68	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table D-12. Maximum Sustainable Speed, Clear Sky, 25% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	25	25	77	BLACK_TOP	-50	0.60	0.85	1.05	2.2	3.1	3.8	1.3	1.9	2.4
Clear_Sky	25	25	77	BLACK_TOP	-40	0.70	0.95	1.15	2.5	3.4	4.1	1.6	2.1	2.6
Clear_Sky	25	25	77	BLACK_TOP	-30	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Clear_Sky	25	25	77	BLACK_TOP	-20	0.95	1.25	1.45	3.4	4.5	5.2	2.1	2.8	3.2
Clear_Sky	25	25	77	BLACK_TOP	-15	1.05	1.35	1.55	3.8	4.9	5.6	2.4	3.0	3.5
Clear_Sky	25	25	77	BLACK_TOP	-10	1.15	1.45	1.65	4.1	5.2	5.9	2.6	3.2	3.7
Clear_Sky	25	25	77	BLACK_TOP	-5	1.25	1.55	1.75	4.5	5.6	6.3	2.8	3.5	3.9
Clear_Sky	25	25	77	BLACK_TOP	0	1.35	1.65	1.85	4.9	5.9	6.7	3.0	3.7	4.1
Clear_Sky	25	25	77	BLACK_TOP	5	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Clear_Sky	25	25	77	BLACK_TOP	10	0.60	0.85	1.05	2.2	3.1	3.8	1.3	1.9	2.4
Clear_Sky	25	25	77	BLACK_TOP	15	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Clear_Sky	25	25	77	BLACK_TOP	20	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	25	25	77	BLACK_TOP	30	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	25	25	77	BLACK_TOP	40	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	25	25	77	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	25	25	77	DIRT_ROAD	-50	0.55	0.80	0.95	2.0	2.9	3.4	1.2	1.8	2.1
Clear_Sky	25	25	77	DIRT_ROAD	-40	0.65	0.90	1.05	2.3	3.2	3.8	1.5	2.0	2.4
Clear_Sky	25	25	77	DIRT_ROAD	-30	0.75	1.05	1.20	2.7	3.8	4.3	1.7	2.4	2.7
Clear_Sky	25	25	77	DIRT_ROAD	-20	0.90	1.20	1.35	3.2	4.3	4.9	2.0	2.7	3.0
Clear_Sky	25	25	77	DIRT_ROAD	-15	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Clear_Sky	25	25	77	DIRT_ROAD	-10	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Clear_Sky	25	25	77	DIRT_ROAD	-5	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Clear_Sky	25	25	77	DIRT_ROAD	0	1.30	1.60	1.75	4.7	5.8	6.3	2.9	3.6	3.9
Clear_Sky	25	25	77	DIRT_ROAD	5	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Clear_Sky	25	25	77	DIRT_ROAD	10	0.55	0.80	0.95	2.0	2.9	3.4	1.2	1.8	2.1
Clear_Sky	25	25	77	DIRT_ROAD	15	0.40	0.60	0.75	1.4	2.2	2.7	0.9	1.3	1.7
Clear_Sky	25	25	77	DIRT_ROAD	20	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Clear_Sky	25	25	77	DIRT_ROAD	30	0.20	0.35	0.40	0.7	1.3	1.4	0.4	0.8	0.9
Clear_Sky	25	25	77	DIRT_ROAD	40	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	25	25	77	DIRT_ROAD	50	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Clear_Sky	25	25	77	LOOSE_SAND	-50	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Clear_Sky	25	25	77	LOOSE_SAND	-40	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Clear_Sky	25	25	77	LOOSE_SAND	-30	0.45	0.65	0.75	1.6	2.3	2.7	1.0	1.5	1.7
Clear_Sky	25	25	77	LOOSE_SAND	-20	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Clear_Sky	25	25	77	LOOSE_SAND	-15	0.65	0.85	0.95	2.3	3.1	3.4	1.5	1.9	2.1
Clear_Sky	25	25	77	LOOSE_SAND	-10	0.75	0.95	1.05	2.7	3.4	3.8	1.7	2.1	2.4
Clear_Sky	25	25	77	LOOSE_SAND	-5	0.80	1.05	1.15	2.9	3.8	4.1	1.8	2.4	2.6
Clear_Sky	25	25	77	LOOSE_SAND	0	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Clear_Sky	25	25	77	LOOSE_SAND	5	0.50	0.70	0.80	1.8	2.5	2.9	1.1	1.6	1.8
Clear_Sky	25	25	77	LOOSE_SAND	10	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Clear_Sky	25	25	77	LOOSE_SAND	15	0.20	0.35	0.40	0.7	1.3	1.4	0.4	0.8	0.9
Clear_Sky	25	25	77	LOOSE_SAND	20	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	25	25	77	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	25	25	77	LOOSE_SAND	40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	25	25	77	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table D-13. Maximum Sustainable Speed, Clear Sky, 25% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	25	30	86	BLACK_TOP	-50	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Clear_Sky	25	30	86	BLACK_TOP	-40	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Clear_Sky	25	30	86	BLACK_TOP	-30	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Clear_Sky	25	30	86	BLACK_TOP	-20	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Clear_Sky	25	30	86	BLACK_TOP	-15	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Clear_Sky	25	30	86	BLACK_TOP	-10	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Clear_Sky	25	30	86	BLACK_TOP	-5	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Clear_Sky	25	30	86	BLACK_TOP	0	1.25	1.45	1.65	4.5	5.2	5.9	2.8	3.2	3.7
Clear_Sky	25	30	86	BLACK_TOP	5	0.75	1.00	1.15	2.7	3.6	4.1	1.7	2.2	2.6
Clear_Sky	25	30	86	BLACK_TOP	10	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Clear_Sky	25	30	86	BLACK_TOP	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Clear_Sky	25	30	86	BLACK_TOP	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	25	30	86	BLACK_TOP	30	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	25	30	86	BLACK_TOP	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	25	30	86	BLACK_TOP	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	25	30	86	DIRT_ROAD	-50	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Clear_Sky	25	30	86	DIRT_ROAD	-40	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Clear_Sky	25	30	86	DIRT_ROAD	-30	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Clear_Sky	25	30	86	DIRT_ROAD	-20	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Clear_Sky	25	30	86	DIRT_ROAD	-15	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Clear_Sky	25	30	86	DIRT_ROAD	-10	0.95	1.20	1.35	3.4	4.3	4.9	2.1	2.7	3.0
Clear_Sky	25	30	86	DIRT_ROAD	-5	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Clear_Sky	25	30	86	DIRT_ROAD	0	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Clear_Sky	25	30	86	DIRT_ROAD	5	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Clear_Sky	25	30	86	DIRT_ROAD	10	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Clear_Sky	25	30	86	DIRT_ROAD	15	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Clear_Sky	25	30	86	DIRT_ROAD	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	25	30	86	DIRT_ROAD	30	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	25	30	86	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	25	30	86	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	25	30	86	LOOSE_SAND	-50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	25	30	86	LOOSE_SAND	-40	0.30	0.45	0.50	1.1	1.6	1.8	0.7	1.0	1.1
Clear_Sky	25	30	86	LOOSE_SAND	-30	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	25	30	86	LOOSE_SAND	-20	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Clear_Sky	25	30	86	LOOSE_SAND	-15	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Clear_Sky	25	30	86	LOOSE_SAND	-10	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Clear_Sky	25	30	86	LOOSE_SAND	-5	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Clear_Sky	25	30	86	LOOSE_SAND	0	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Clear_Sky	25	30	86	LOOSE_SAND	5	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Clear_Sky	25	30	86	LOOSE_SAND	10	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	25	30	86	LOOSE_SAND	15	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	25	30	86	LOOSE_SAND	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	25	30	86	LOOSE_SAND	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	25	30	86	LOOSE_SAND	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	25	30	86	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table D-14. Maximum Sustainable Speed, Clear Sky, 25% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	25	35	95	BLACK_TOP	-50	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Clear_Sky	25	35	95	BLACK_TOP	-40	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Clear_Sky	25	35	95	BLACK_TOP	-30	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Clear_Sky	25	35	95	BLACK_TOP	-20	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Clear_Sky	25	35	95	BLACK_TOP	-15	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Clear_Sky	25	35	95	BLACK_TOP	-10	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Clear_Sky	25	35	95	BLACK_TOP	-5	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Clear_Sky	25	35	95	BLACK_TOP	0	1.10	1.20	1.40	4.0	4.3	5.0	2.5	2.7	3.1
Clear_Sky	25	35	95	BLACK_TOP	5	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Clear_Sky	25	35	95	BLACK_TOP	10	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Clear_Sky	25	35	95	BLACK_TOP	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Clear_Sky	25	35	95	BLACK_TOP	20	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	25	35	95	BLACK_TOP	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	25	35	95	BLACK_TOP	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	25	35	95	BLACK_TOP	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	25	35	95	DIRT_ROAD	-50	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Clear_Sky	25	35	95	DIRT_ROAD	-40	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Clear_Sky	25	35	95	DIRT_ROAD	-30	0.55	0.65	0.80	2.0	2.3	2.9	1.2	1.5	1.8
Clear_Sky	25	35	95	DIRT_ROAD	-20	0.65	0.75	0.95	2.3	2.7	3.4	1.5	1.7	2.1
Clear_Sky	25	35	95	DIRT_ROAD	-15	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Clear_Sky	25	35	95	DIRT_ROAD	-10	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Clear_Sky	25	35	95	DIRT_ROAD	-5	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Clear_Sky	25	35	95	DIRT_ROAD	0	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Clear_Sky	25	35	95	DIRT_ROAD	5	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Clear_Sky	25	35	95	DIRT_ROAD	10	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Clear_Sky	25	35	95	DIRT_ROAD	15	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	25	35	95	DIRT_ROAD	20	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	25	35	95	DIRT_ROAD	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	25	35	95	DIRT_ROAD	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	25	35	95	DIRT_ROAD	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	25	35	95	LOOSE_SAND	-50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	25	35	95	LOOSE_SAND	-40	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Clear_Sky	25	35	95	LOOSE_SAND	-30	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Clear_Sky	25	35	95	LOOSE_SAND	-20	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	25	35	95	LOOSE_SAND	-15	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Clear_Sky	25	35	95	LOOSE_SAND	-10	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Clear_Sky	25	35	95	LOOSE_SAND	-5	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Clear_Sky	25	35	95	LOOSE_SAND	0	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Clear_Sky	25	35	95	LOOSE_SAND	5	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Clear_Sky	25	35	95	LOOSE_SAND	10	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	25	35	95	LOOSE_SAND	15	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Clear_Sky	25	35	95	LOOSE_SAND	20	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Clear_Sky	25	35	95	LOOSE_SAND	30	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	25	35	95	LOOSE_SAND	40	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Clear_Sky	25	35	95	LOOSE_SAND	50	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1

Table D-15. Maximum Sustainable Speed, Clear Sky, 50% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	50	5	41	BLACK_TOP	-50	0.95	1.20	1.60	3.4	4.3	5.8	2.1	2.7	3.6
Clear_Sky	50	5	41	BLACK_TOP	-40	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Clear_Sky	50	5	41	BLACK_TOP	-30	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	50	5	41	BLACK_TOP	-20	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Clear_Sky	50	5	41	BLACK_TOP	-15	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Clear_Sky	50	5	41	BLACK_TOP	-10	1.60	1.85	2.30	5.8	6.7	8.3	3.6	4.1	5.2
Clear_Sky	50	5	41	BLACK_TOP	-5	1.70	1.95	2.40	6.1	7.0	8.6	3.8	4.4	5.4
Clear_Sky	50	5	41	BLACK_TOP	0	1.80	2.05	2.50	6.5	7.4	9.0	4.0	4.6	5.6
Clear_Sky	50	5	41	BLACK_TOP	5	1.30	1.55	2.00	4.7	5.6	7.2	2.9	3.5	4.5
Clear_Sky	50	5	41	BLACK_TOP	10	0.95	1.20	1.60	3.4	4.3	5.8	2.1	2.7	3.6
Clear_Sky	50	5	41	BLACK_TOP	15	0.75	0.95	1.30	2.7	3.4	4.7	1.7	2.1	2.9
Clear_Sky	50	5	41	BLACK_TOP	20	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Clear_Sky	50	5	41	BLACK_TOP	30	0.40	0.55	0.80	1.4	2.0	2.9	0.9	1.2	1.8
Clear_Sky	50	5	41	BLACK_TOP	40	0.30	0.45	0.65	1.1	1.6	2.3	0.7	1.0	1.5
Clear_Sky	50	5	41	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	50	5	41	DIRT_ROAD	-50	0.90	1.10	1.50	3.2	4.0	5.4	2.0	2.5	3.4
Clear_Sky	50	5	41	DIRT_ROAD	-40	1.00	1.25	1.65	3.6	4.5	5.9	2.2	2.8	3.7
Clear_Sky	50	5	41	DIRT_ROAD	-30	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Clear_Sky	50	5	41	DIRT_ROAD	-20	1.30	1.55	2.00	4.7	5.6	7.2	2.9	3.5	4.5
Clear_Sky	50	5	41	DIRT_ROAD	-15	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Clear_Sky	50	5	41	DIRT_ROAD	-10	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Clear_Sky	50	5	41	DIRT_ROAD	-5	1.60	1.85	2.30	5.8	6.7	8.3	3.6	4.1	5.2
Clear_Sky	50	5	41	DIRT_ROAD	0	1.70	2.00	2.40	6.1	7.2	8.6	3.8	4.5	5.4
Clear_Sky	50	5	41	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Clear_Sky	50	5	41	DIRT_ROAD	10	0.90	1.10	1.50	3.2	4.0	5.4	2.0	2.5	3.4
Clear_Sky	50	5	41	DIRT_ROAD	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Clear_Sky	50	5	41	DIRT_ROAD	20	0.55	0.70	1.00	2.0	2.5	3.6	1.2	1.6	2.2
Clear_Sky	50	5	41	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Clear_Sky	50	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	50	5	41	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	50	5	41	LOOSE_SAND	-50	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Clear_Sky	50	5	41	LOOSE_SAND	-40	0.60	0.75	1.05	2.2	2.7	3.8	1.3	1.7	2.4
Clear_Sky	50	5	41	LOOSE_SAND	-30	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Clear_Sky	50	5	41	LOOSE_SAND	-20	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Clear_Sky	50	5	41	LOOSE_SAND	-15	0.95	1.10	1.40	3.4	4.0	5.0	2.1	2.5	3.1
Clear_Sky	50	5	41	LOOSE_SAND	-10	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Clear_Sky	50	5	41	LOOSE_SAND	-5	1.10	1.30	1.60	4.0	4.7	5.8	2.5	2.9	3.6
Clear_Sky	50	5	41	LOOSE_SAND	0	1.25	1.40	1.75	4.5	5.0	6.3	2.8	3.1	3.9
Clear_Sky	50	5	41	LOOSE_SAND	5	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Clear_Sky	50	5	41	LOOSE_SAND	10	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Clear_Sky	50	5	41	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	50	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	50	5	41	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	50	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	50	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table D-16. Maximum Sustainable Speed, Clear Sky, 50% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	50	10	50	BLACK_TOP	-50	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Clear_Sky	50	10	50	BLACK_TOP	-40	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Clear_Sky	50	10	50	BLACK_TOP	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Clear_Sky	50	10	50	BLACK_TOP	-20	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Clear_Sky	50	10	50	BLACK_TOP	-15	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Clear_Sky	50	10	50	BLACK_TOP	-10	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Clear_Sky	50	10	50	BLACK_TOP	-5	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Clear_Sky	50	10	50	BLACK_TOP	0	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Clear_Sky	50	10	50	BLACK_TOP	5	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Clear_Sky	50	10	50	BLACK_TOP	10	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Clear_Sky	50	10	50	BLACK_TOP	15	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Clear_Sky	50	10	50	BLACK_TOP	20	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Clear_Sky	50	10	50	BLACK_TOP	30	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Clear_Sky	50	10	50	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	50	10	50	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	50	10	50	DIRT_ROAD	-50	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Clear_Sky	50	10	50	DIRT_ROAD	-40	0.95	1.15	1.45	3.4	4.1	5.2	2.1	2.6	3.2
Clear_Sky	50	10	50	DIRT_ROAD	-30	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Clear_Sky	50	10	50	DIRT_ROAD	-20	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Clear_Sky	50	10	50	DIRT_ROAD	-15	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Clear_Sky	50	10	50	DIRT_ROAD	-10	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Clear_Sky	50	10	50	DIRT_ROAD	-5	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Clear_Sky	50	10	50	DIRT_ROAD	0	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Clear_Sky	50	10	50	DIRT_ROAD	5	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Clear_Sky	50	10	50	DIRT_ROAD	10	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Clear_Sky	50	10	50	DIRT_ROAD	15	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Clear_Sky	50	10	50	DIRT_ROAD	20	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	50	10	50	DIRT_ROAD	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Clear_Sky	50	10	50	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	50	10	50	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	50	10	50	LOOSE_SAND	-50	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Clear_Sky	50	10	50	LOOSE_SAND	-40	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Clear_Sky	50	10	50	LOOSE_SAND	-30	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Clear_Sky	50	10	50	LOOSE_SAND	-20	0.80	0.95	1.20	2.9	3.4	4.3	1.8	2.1	2.7
Clear_Sky	50	10	50	LOOSE_SAND	-15	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Clear_Sky	50	10	50	LOOSE_SAND	-10	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Clear_Sky	50	10	50	LOOSE_SAND	-5	1.05	1.25	1.45	3.8	4.5	5.2	2.4	2.8	3.2
Clear_Sky	50	10	50	LOOSE_SAND	0	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Clear_Sky	50	10	50	LOOSE_SAND	5	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Clear_Sky	50	10	50	LOOSE_SAND	10	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Clear_Sky	50	10	50	LOOSE_SAND	15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Clear_Sky	50	10	50	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	50	10	50	LOOSE_SAND	30	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	50	10	50	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	50	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table D-17. Maximum Sustainable Speed, Clear Sky, 50% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	50	15	59	BLACK_TOP	-50	0.80	1.05	1.25	2.9	3.8	4.5	1.8	2.4	2.8
Clear_Sky	50	15	59	BLACK_TOP	-40	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Clear_Sky	50	15	59	BLACK_TOP	-30	1.00	1.30	1.55	3.6	4.7	5.6	2.2	2.9	3.5
Clear_Sky	50	15	59	BLACK_TOP	-20	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Clear_Sky	50	15	59	BLACK_TOP	-15	1.25	1.55	1.80	4.5	5.6	6.5	2.8	3.5	4.0
Clear_Sky	50	15	59	BLACK_TOP	-10	1.35	1.65	1.90	4.9	5.9	6.8	3.0	3.7	4.3
Clear_Sky	50	15	59	BLACK_TOP	-5	1.45	1.75	2.00	5.2	6.3	7.2	3.2	3.9	4.5
Clear_Sky	50	15	59	BLACK_TOP	0	1.60	1.85	2.10	5.8	6.7	7.6	3.6	4.1	4.7
Clear_Sky	50	15	59	BLACK_TOP	5	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Clear_Sky	50	15	59	BLACK_TOP	10	0.80	1.05	1.25	2.9	3.8	4.5	1.8	2.4	2.8
Clear_Sky	50	15	59	BLACK_TOP	15	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Clear_Sky	50	15	59	BLACK_TOP	20	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Clear_Sky	50	15	59	BLACK_TOP	30	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Clear_Sky	50	15	59	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	50	15	59	BLACK_TOP	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	50	15	59	DIRT_ROAD	-50	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Clear_Sky	50	15	59	DIRT_ROAD	-40	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Clear_Sky	50	15	59	DIRT_ROAD	-30	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Clear_Sky	50	15	59	DIRT_ROAD	-20	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Clear_Sky	50	15	59	DIRT_ROAD	-15	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Clear_Sky	50	15	59	DIRT_ROAD	-10	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Clear_Sky	50	15	59	DIRT_ROAD	-5	1.40	1.65	1.90	5.0	5.9	6.8	3.1	3.7	4.3
Clear_Sky	50	15	59	DIRT_ROAD	0	1.50	1.75	2.00	5.4	6.3	7.2	3.4	3.9	4.5
Clear_Sky	50	15	59	DIRT_ROAD	5	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Clear_Sky	50	15	59	DIRT_ROAD	10	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Clear_Sky	50	15	59	DIRT_ROAD	15	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Clear_Sky	50	15	59	DIRT_ROAD	20	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Clear_Sky	50	15	59	DIRT_ROAD	30	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	50	15	59	DIRT_ROAD	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	50	15	59	DIRT_ROAD	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	50	15	59	LOOSE_SAND	-50	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Clear_Sky	50	15	59	LOOSE_SAND	-40	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Clear_Sky	50	15	59	LOOSE_SAND	-30	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Clear_Sky	50	15	59	LOOSE_SAND	-20	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Clear_Sky	50	15	59	LOOSE_SAND	-15	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Clear_Sky	50	15	59	LOOSE_SAND	-10	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Clear_Sky	50	15	59	LOOSE_SAND	-5	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Clear_Sky	50	15	59	LOOSE_SAND	0	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Clear_Sky	50	15	59	LOOSE_SAND	5	0.65	0.80	1.00	2.3	2.9	3.6	1.5	1.8	2.2
Clear_Sky	50	15	59	LOOSE_SAND	10	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Clear_Sky	50	15	59	LOOSE_SAND	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	50	15	59	LOOSE_SAND	20	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	50	15	59	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	50	15	59	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	50	15	59	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table D-18. Maximum Sustainable Speed, Clear Sky, 50% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	50	20	68	BLACK_TOP	-50	0.70	0.95	1.05	2.5	3.4	3.8	1.6	2.1	2.4
Clear_Sky	50	20	68	BLACK_TOP	-40	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Clear_Sky	50	20	68	BLACK_TOP	-30	0.90	1.20	1.35	3.2	4.3	4.9	2.0	2.7	3.0
Clear_Sky	50	20	68	BLACK_TOP	-20	1.05	1.35	1.50	3.8	4.9	5.4	2.4	3.0	3.4
Clear_Sky	50	20	68	BLACK_TOP	-15	1.15	1.45	1.60	4.1	5.2	5.8	2.6	3.2	3.6
Clear_Sky	50	20	68	BLACK_TOP	-10	1.25	1.55	1.70	4.5	5.6	6.1	2.8	3.5	3.8
Clear_Sky	50	20	68	BLACK_TOP	-5	1.35	1.65	1.80	4.9	5.9	6.5	3.0	3.7	4.0
Clear_Sky	50	20	68	BLACK_TOP	0	1.45	1.75	1.90	5.2	6.3	6.8	3.2	3.9	4.3
Clear_Sky	50	20	68	BLACK_TOP	5	1.00	1.25	1.40	3.6	4.5	5.0	2.2	2.8	3.1
Clear_Sky	50	20	68	BLACK_TOP	10	0.70	0.95	1.05	2.5	3.4	3.8	1.6	2.1	2.4
Clear_Sky	50	20	68	BLACK_TOP	15	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Clear_Sky	50	20	68	BLACK_TOP	20	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Clear_Sky	50	20	68	BLACK_TOP	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	50	20	68	BLACK_TOP	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	50	20	68	BLACK_TOP	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	50	20	68	DIRT_ROAD	-50	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Clear_Sky	50	20	68	DIRT_ROAD	-40	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Clear_Sky	50	20	68	DIRT_ROAD	-30	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Clear_Sky	50	20	68	DIRT_ROAD	-20	1.00	1.25	1.40	3.6	4.5	5.0	2.2	2.8	3.1
Clear_Sky	50	20	68	DIRT_ROAD	-15	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Clear_Sky	50	20	68	DIRT_ROAD	-10	1.15	1.45	1.60	4.1	5.2	5.8	2.6	3.2	3.6
Clear_Sky	50	20	68	DIRT_ROAD	-5	1.30	1.55	1.70	4.7	5.6	6.1	2.9	3.5	3.8
Clear_Sky	50	20	68	DIRT_ROAD	0	1.40	1.65	1.80	5.0	5.9	6.5	3.1	3.7	4.0
Clear_Sky	50	20	68	DIRT_ROAD	5	0.90	1.20	1.35	3.2	4.3	4.9	2.0	2.7	3.0
Clear_Sky	50	20	68	DIRT_ROAD	10	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Clear_Sky	50	20	68	DIRT_ROAD	15	0.45	0.65	0.75	1.6	2.3	2.7	1.0	1.5	1.7
Clear_Sky	50	20	68	DIRT_ROAD	20	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Clear_Sky	50	20	68	DIRT_ROAD	30	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	50	20	68	DIRT_ROAD	40	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	50	20	68	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	50	20	68	LOOSE_SAND	-50	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Clear_Sky	50	20	68	LOOSE_SAND	-40	0.45	0.60	0.65	1.6	2.2	2.3	1.0	1.3	1.5
Clear_Sky	50	20	68	LOOSE_SAND	-30	0.50	0.70	0.80	1.8	2.5	2.9	1.1	1.6	1.8
Clear_Sky	50	20	68	LOOSE_SAND	-20	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Clear_Sky	50	20	68	LOOSE_SAND	-15	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Clear_Sky	50	20	68	LOOSE_SAND	-10	0.80	1.00	1.10	2.9	3.6	4.0	1.8	2.2	2.5
Clear_Sky	50	20	68	LOOSE_SAND	-5	0.90	1.10	1.20	3.2	4.0	4.3	2.0	2.5	2.7
Clear_Sky	50	20	68	LOOSE_SAND	0	1.00	1.20	1.30	3.6	4.3	4.7	2.2	2.7	2.9
Clear_Sky	50	20	68	LOOSE_SAND	5	0.55	0.75	0.85	2.0	2.7	3.1	1.2	1.7	1.9
Clear_Sky	50	20	68	LOOSE_SAND	10	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Clear_Sky	50	20	68	LOOSE_SAND	15	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	50	20	68	LOOSE_SAND	20	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	50	20	68	LOOSE_SAND	30	0.10	0.20	0.20	0.4	0.7	0.7	0.2	0.4	0.4
Clear_Sky	50	20	68	LOOSE_SAND	40	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Clear_Sky	50	20	68	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table D-19. Maximum Sustainable Speed, Clear Sky, 50% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	50	25	77	BLACK_TOP	-50	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Clear_Sky	50	25	77	BLACK_TOP	-40	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Clear_Sky	50	25	77	BLACK_TOP	-30	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Clear_Sky	50	25	77	BLACK_TOP	-20	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Clear_Sky	50	25	77	BLACK_TOP	-15	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Clear_Sky	50	25	77	BLACK_TOP	-10	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Clear_Sky	50	25	77	BLACK_TOP	-5	1.20	1.40	1.55	4.3	5.0	5.6	2.7	3.1	3.5
Clear_Sky	50	25	77	BLACK_TOP	0	1.35	1.50	1.65	4.9	5.4	5.9	3.0	3.4	3.7
Clear_Sky	50	25	77	BLACK_TOP	5	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Clear_Sky	50	25	77	BLACK_TOP	10	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Clear_Sky	50	25	77	BLACK_TOP	15	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Clear_Sky	50	25	77	BLACK_TOP	20	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Clear_Sky	50	25	77	BLACK_TOP	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	50	25	77	BLACK_TOP	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	50	25	77	BLACK_TOP	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	50	25	77	DIRT_ROAD	-50	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Clear_Sky	50	25	77	DIRT_ROAD	-40	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Clear_Sky	50	25	77	DIRT_ROAD	-30	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Clear_Sky	50	25	77	DIRT_ROAD	-20	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Clear_Sky	50	25	77	DIRT_ROAD	-15	0.95	1.10	1.30	3.4	4.0	4.7	2.1	2.5	2.9
Clear_Sky	50	25	77	DIRT_ROAD	-10	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Clear_Sky	50	25	77	DIRT_ROAD	-5	1.15	1.30	1.50	4.1	4.7	5.4	2.6	2.9	3.4
Clear_Sky	50	25	77	DIRT_ROAD	0	1.25	1.45	1.60	4.5	5.2	5.8	2.8	3.2	3.6
Clear_Sky	50	25	77	DIRT_ROAD	5	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Clear_Sky	50	25	77	DIRT_ROAD	10	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Clear_Sky	50	25	77	DIRT_ROAD	15	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	50	25	77	DIRT_ROAD	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	50	25	77	DIRT_ROAD	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	50	25	77	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	50	25	77	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	50	25	77	LOOSE_SAND	-50	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Clear_Sky	50	25	77	LOOSE_SAND	-40	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Clear_Sky	50	25	77	LOOSE_SAND	-30	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Clear_Sky	50	25	77	LOOSE_SAND	-20	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Clear_Sky	50	25	77	LOOSE_SAND	-15	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Clear_Sky	50	25	77	LOOSE_SAND	-10	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Clear_Sky	50	25	77	LOOSE_SAND	-5	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Clear_Sky	50	25	77	LOOSE_SAND	0	0.90	1.05	1.15	3.2	3.8	4.1	2.0	2.4	2.6
Clear_Sky	50	25	77	LOOSE_SAND	5	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Clear_Sky	50	25	77	LOOSE_SAND	10	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Clear_Sky	50	25	77	LOOSE_SAND	15	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	50	25	77	LOOSE_SAND	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	50	25	77	LOOSE_SAND	30	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Clear_Sky	50	25	77	LOOSE_SAND	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	50	25	77	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table D-20. Maximum Sustainable Speed, Clear Sky, 50% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	50	30	86	BLACK_TOP	-50	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Clear_Sky	50	30	86	BLACK_TOP	-40	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Clear_Sky	50	30	86	BLACK_TOP	-30	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Clear_Sky	50	30	86	BLACK_TOP	-20	0.75	0.80	0.95	2.7	2.9	3.4	1.7	1.8	2.1
Clear_Sky	50	30	86	BLACK_TOP	-15	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Clear_Sky	50	30	86	BLACK_TOP	-10	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Clear_Sky	50	30	86	BLACK_TOP	-5	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Clear_Sky	50	30	86	BLACK_TOP	0	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Clear_Sky	50	30	86	BLACK_TOP	5	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Clear_Sky	50	30	86	BLACK_TOP	10	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Clear_Sky	50	30	86	BLACK_TOP	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Clear_Sky	50	30	86	BLACK_TOP	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	50	30	86	BLACK_TOP	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	50	30	86	BLACK_TOP	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	50	30	86	BLACK_TOP	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	50	30	86	DIRT_ROAD	-50	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Clear_Sky	50	30	86	DIRT_ROAD	-40	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Clear_Sky	50	30	86	DIRT_ROAD	-30	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Clear_Sky	50	30	86	DIRT_ROAD	-20	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Clear_Sky	50	30	86	DIRT_ROAD	-15	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Clear_Sky	50	30	86	DIRT_ROAD	-10	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Clear_Sky	50	30	86	DIRT_ROAD	-5	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Clear_Sky	50	30	86	DIRT_ROAD	0	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Clear_Sky	50	30	86	DIRT_ROAD	5	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Clear_Sky	50	30	86	DIRT_ROAD	10	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Clear_Sky	50	30	86	DIRT_ROAD	15	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Clear_Sky	50	30	86	DIRT_ROAD	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	50	30	86	DIRT_ROAD	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	50	30	86	DIRT_ROAD	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	50	30	86	DIRT_ROAD	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	50	30	86	LOOSE_SAND	-50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	50	30	86	LOOSE_SAND	-40	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Clear_Sky	50	30	86	LOOSE_SAND	-30	0.35	0.35	0.45	1.3	1.3	1.6	0.8	0.8	1.0
Clear_Sky	50	30	86	LOOSE_SAND	-20	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Clear_Sky	50	30	86	LOOSE_SAND	-15	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Clear_Sky	50	30	86	LOOSE_SAND	-10	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Clear_Sky	50	30	86	LOOSE_SAND	-5	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Clear_Sky	50	30	86	LOOSE_SAND	0	0.75	0.80	0.95	2.7	2.9	3.4	1.7	1.8	2.1
Clear_Sky	50	30	86	LOOSE_SAND	5	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Clear_Sky	50	30	86	LOOSE_SAND	10	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	50	30	86	LOOSE_SAND	15	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	50	30	86	LOOSE_SAND	20	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	50	30	86	LOOSE_SAND	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	50	30	86	LOOSE_SAND	40	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Clear_Sky	50	30	86	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table D-21. Maximum Sustainable Speed, Clear Sky, 50% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	50	35	95	BLACK_TOP	-50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	50	35	95	BLACK_TOP	-40	0.15	0.25	0.40	0.5	0.9	1.4	0.3	0.6	0.9
Clear_Sky	50	35	95	BLACK_TOP	-30	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Clear_Sky	50	35	95	BLACK_TOP	-20	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Clear_Sky	50	35	95	BLACK_TOP	-15	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Clear_Sky	50	35	95	BLACK_TOP	-10	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Clear_Sky	50	35	95	BLACK_TOP	-5	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	50	35	95	BLACK_TOP	0	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Clear_Sky	50	35	95	BLACK_TOP	5	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Clear_Sky	50	35	95	BLACK_TOP	10	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	50	35	95	BLACK_TOP	15	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	50	35	95	BLACK_TOP	20	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	50	35	95	BLACK_TOP	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	50	35	95	BLACK_TOP	40	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Clear_Sky	50	35	95	BLACK_TOP	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	50	35	95	DIRT_ROAD	-50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	50	35	95	DIRT_ROAD	-40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Clear_Sky	50	35	95	DIRT_ROAD	-30	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Clear_Sky	50	35	95	DIRT_ROAD	-20	0.30	0.35	0.55	1.1	1.3	2.0	0.7	0.8	1.2
Clear_Sky	50	35	95	DIRT_ROAD	-15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Clear_Sky	50	35	95	DIRT_ROAD	-10	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	50	35	95	DIRT_ROAD	-5	0.50	0.60	0.80	1.8	2.2	2.9	1.1	1.3	1.8
Clear_Sky	50	35	95	DIRT_ROAD	0	0.60	0.70	0.90	2.2	2.5	3.2	1.3	1.6	2.0
Clear_Sky	50	35	95	DIRT_ROAD	5	0.25	0.30	0.50	0.9	1.1	1.8	0.6	0.7	1.1
Clear_Sky	50	35	95	DIRT_ROAD	10	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	50	35	95	DIRT_ROAD	15	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Clear_Sky	50	35	95	DIRT_ROAD	20	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	50	35	95	DIRT_ROAD	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	50	35	95	DIRT_ROAD	40	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Clear_Sky	50	35	95	DIRT_ROAD	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	50	35	95	LOOSE_SAND	-50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	50	35	95	LOOSE_SAND	-40	0.05	0.10	0.20	0.2	0.4	0.7	0.1	0.2	0.4
Clear_Sky	50	35	95	LOOSE_SAND	-30	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	50	35	95	LOOSE_SAND	-20	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	50	35	95	LOOSE_SAND	-15	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	50	35	95	LOOSE_SAND	-10	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	50	35	95	LOOSE_SAND	-5	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	50	35	95	LOOSE_SAND	0	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Clear_Sky	50	35	95	LOOSE_SAND	5	0.10	0.20	0.30	0.4	0.7	1.1	0.2	0.4	0.7
Clear_Sky	50	35	95	LOOSE_SAND	10	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	50	35	95	LOOSE_SAND	15	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	50	35	95	LOOSE_SAND	20	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Clear_Sky	50	35	95	LOOSE_SAND	30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	50	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	50	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table D-22. Maximum Sustainable Speed, Clear Sky, 75% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	75	5	41	BLACK_TOP	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Clear_Sky	75	5	41	BLACK_TOP	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Clear_Sky	75	5	41	BLACK_TOP	-30	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Clear_Sky	75	5	41	BLACK_TOP	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Clear_Sky	75	5	41	BLACK_TOP	-15	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Clear_Sky	75	5	41	BLACK_TOP	-10	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Clear_Sky	75	5	41	BLACK_TOP	-5	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Clear_Sky	75	5	41	BLACK_TOP	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Clear_Sky	75	5	41	BLACK_TOP	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Clear_Sky	75	5	41	BLACK_TOP	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Clear_Sky	75	5	41	BLACK_TOP	15	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Clear_Sky	75	5	41	BLACK_TOP	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Clear_Sky	75	5	41	BLACK_TOP	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Clear_Sky	75	5	41	BLACK_TOP	40	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Clear_Sky	75	5	41	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	75	5	41	DIRT_ROAD	-50	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Clear_Sky	75	5	41	DIRT_ROAD	-40	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Clear_Sky	75	5	41	DIRT_ROAD	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Clear_Sky	75	5	41	DIRT_ROAD	-20	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Clear_Sky	75	5	41	DIRT_ROAD	-15	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Clear_Sky	75	5	41	DIRT_ROAD	-10	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Clear_Sky	75	5	41	DIRT_ROAD	-5	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Clear_Sky	75	5	41	DIRT_ROAD	0	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Clear_Sky	75	5	41	DIRT_ROAD	5	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Clear_Sky	75	5	41	DIRT_ROAD	10	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Clear_Sky	75	5	41	DIRT_ROAD	15	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Clear_Sky	75	5	41	DIRT_ROAD	20	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Clear_Sky	75	5	41	DIRT_ROAD	30	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Clear_Sky	75	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	75	5	41	DIRT_ROAD	50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Clear_Sky	75	5	41	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	75	5	41	LOOSE_SAND	-40	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Clear_Sky	75	5	41	LOOSE_SAND	-30	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Clear_Sky	75	5	41	LOOSE_SAND	-20	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Clear_Sky	75	5	41	LOOSE_SAND	-15	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Clear_Sky	75	5	41	LOOSE_SAND	-10	1.00	1.20	1.45	3.6	4.3	5.2	2.2	2.7	3.2
Clear_Sky	75	5	41	LOOSE_SAND	-5	1.10	1.30	1.55	4.0	4.7	5.6	2.5	2.9	3.5
Clear_Sky	75	5	41	LOOSE_SAND	0	1.25	1.40	1.65	4.5	5.0	5.9	2.8	3.1	3.7
Clear_Sky	75	5	41	LOOSE_SAND	5	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Clear_Sky	75	5	41	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	75	5	41	LOOSE_SAND	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Clear_Sky	75	5	41	LOOSE_SAND	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	75	5	41	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	75	5	41	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	75	5	41	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table D-23. Maximum Sustainable Speed, Clear Sky, 75% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	75	10	50	BLACK_TOP	-50	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Clear_Sky	75	10	50	BLACK_TOP	-40	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Clear_Sky	75	10	50	BLACK_TOP	-30	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Clear_Sky	75	10	50	BLACK_TOP	-20	1.25	1.55	1.80	4.5	5.6	6.5	2.8	3.5	4.0
Clear_Sky	75	10	50	BLACK_TOP	-15	1.35	1.65	1.90	4.9	5.9	6.8	3.0	3.7	4.3
Clear_Sky	75	10	50	BLACK_TOP	-10	1.45	1.75	2.00	5.2	6.3	7.2	3.2	3.9	4.5
Clear_Sky	75	10	50	BLACK_TOP	-5	1.55	1.85	2.10	5.6	6.7	7.6	3.5	4.1	4.7
Clear_Sky	75	10	50	BLACK_TOP	0	1.70	1.95	2.25	6.1	7.0	8.1	3.8	4.4	5.0
Clear_Sky	75	10	50	BLACK_TOP	5	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Clear_Sky	75	10	50	BLACK_TOP	10	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Clear_Sky	75	10	50	BLACK_TOP	15	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Clear_Sky	75	10	50	BLACK_TOP	20	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Clear_Sky	75	10	50	BLACK_TOP	30	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	75	10	50	BLACK_TOP	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	75	10	50	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	75	10	50	DIRT_ROAD	-50	0.80	1.05	1.25	2.9	3.8	4.5	1.8	2.4	2.8
Clear_Sky	75	10	50	DIRT_ROAD	-40	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Clear_Sky	75	10	50	DIRT_ROAD	-30	1.05	1.30	1.55	3.8	4.7	5.6	2.4	2.9	3.5
Clear_Sky	75	10	50	DIRT_ROAD	-20	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Clear_Sky	75	10	50	DIRT_ROAD	-15	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Clear_Sky	75	10	50	DIRT_ROAD	-10	1.40	1.65	1.90	5.0	5.9	6.8	3.1	3.7	4.3
Clear_Sky	75	10	50	DIRT_ROAD	-5	1.50	1.75	2.00	5.4	6.3	7.2	3.4	3.9	4.5
Clear_Sky	75	10	50	DIRT_ROAD	0	1.60	1.85	2.15	5.8	6.7	7.7	3.6	4.1	4.8
Clear_Sky	75	10	50	DIRT_ROAD	5	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Clear_Sky	75	10	50	DIRT_ROAD	10	0.80	1.05	1.25	2.9	3.8	4.5	1.8	2.4	2.8
Clear_Sky	75	10	50	DIRT_ROAD	15	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Clear_Sky	75	10	50	DIRT_ROAD	20	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Clear_Sky	75	10	50	DIRT_ROAD	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Clear_Sky	75	10	50	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	75	10	50	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	75	10	50	LOOSE_SAND	-50	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Clear_Sky	75	10	50	LOOSE_SAND	-40	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Clear_Sky	75	10	50	LOOSE_SAND	-30	0.65	0.80	1.00	2.3	2.9	3.6	1.5	1.8	2.2
Clear_Sky	75	10	50	LOOSE_SAND	-20	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Clear_Sky	75	10	50	LOOSE_SAND	-15	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Clear_Sky	75	10	50	LOOSE_SAND	-10	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Clear_Sky	75	10	50	LOOSE_SAND	-5	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Clear_Sky	75	10	50	LOOSE_SAND	0	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Clear_Sky	75	10	50	LOOSE_SAND	5	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Clear_Sky	75	10	50	LOOSE_SAND	10	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Clear_Sky	75	10	50	LOOSE_SAND	15	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Clear_Sky	75	10	50	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	75	10	50	LOOSE_SAND	30	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	75	10	50	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	75	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table D-24. Maximum Sustainable Speed, Clear Sky, 75% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	75	15	59	BLACK_TOP	-50	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Clear_Sky	75	15	59	BLACK_TOP	-40	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Clear_Sky	75	15	59	BLACK_TOP	-30	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Clear_Sky	75	15	59	BLACK_TOP	-20	1.15	1.45	1.60	4.1	5.2	5.8	2.6	3.2	3.6
Clear_Sky	75	15	59	BLACK_TOP	-15	1.25	1.55	1.70	4.5	5.6	6.1	2.8	3.5	3.8
Clear_Sky	75	15	59	BLACK_TOP	-10	1.35	1.60	1.80	4.9	5.8	6.5	3.0	3.6	4.0
Clear_Sky	75	15	59	BLACK_TOP	-5	1.45	1.75	1.90	5.2	6.3	6.8	3.2	3.9	4.3
Clear_Sky	75	15	59	BLACK_TOP	0	1.55	1.85	2.05	5.6	6.7	7.4	3.5	4.1	4.6
Clear_Sky	75	15	59	BLACK_TOP	5	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Clear_Sky	75	15	59	BLACK_TOP	10	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Clear_Sky	75	15	59	BLACK_TOP	15	0.60	0.80	0.90	2.2	2.9	3.2	1.3	1.8	2.0
Clear_Sky	75	15	59	BLACK_TOP	20	0.45	0.65	0.75	1.6	2.3	2.7	1.0	1.5	1.7
Clear_Sky	75	15	59	BLACK_TOP	30	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Clear_Sky	75	15	59	BLACK_TOP	40	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Clear_Sky	75	15	59	BLACK_TOP	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	75	15	59	DIRT_ROAD	-50	0.70	0.95	1.10	2.5	3.4	4.0	1.6	2.1	2.5
Clear_Sky	75	15	59	DIRT_ROAD	-40	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Clear_Sky	75	15	59	DIRT_ROAD	-30	0.95	1.20	1.35	3.4	4.3	4.9	2.1	2.7	3.0
Clear_Sky	75	15	59	DIRT_ROAD	-20	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Clear_Sky	75	15	59	DIRT_ROAD	-15	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Clear_Sky	75	15	59	DIRT_ROAD	-10	1.25	1.55	1.70	4.5	5.6	6.1	2.8	3.5	3.8
Clear_Sky	75	15	59	DIRT_ROAD	-5	1.35	1.65	1.80	4.9	5.9	6.5	3.0	3.7	4.0
Clear_Sky	75	15	59	DIRT_ROAD	0	1.50	1.75	1.95	5.4	6.3	7.0	3.4	3.9	4.4
Clear_Sky	75	15	59	DIRT_ROAD	5	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Clear_Sky	75	15	59	DIRT_ROAD	10	0.70	0.95	1.10	2.5	3.4	4.0	1.6	2.1	2.5
Clear_Sky	75	15	59	DIRT_ROAD	15	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Clear_Sky	75	15	59	DIRT_ROAD	20	0.40	0.60	0.70	1.4	2.2	2.5	0.9	1.3	1.6
Clear_Sky	75	15	59	DIRT_ROAD	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	75	15	59	DIRT_ROAD	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	75	15	59	DIRT_ROAD	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	75	15	59	LOOSE_SAND	-50	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Clear_Sky	75	15	59	LOOSE_SAND	-40	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Clear_Sky	75	15	59	LOOSE_SAND	-30	0.55	0.75	0.85	2.0	2.7	3.1	1.2	1.7	1.9
Clear_Sky	75	15	59	LOOSE_SAND	-20	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Clear_Sky	75	15	59	LOOSE_SAND	-15	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Clear_Sky	75	15	59	LOOSE_SAND	-10	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Clear_Sky	75	15	59	LOOSE_SAND	-5	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Clear_Sky	75	15	59	LOOSE_SAND	0	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Clear_Sky	75	15	59	LOOSE_SAND	5	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Clear_Sky	75	15	59	LOOSE_SAND	10	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Clear_Sky	75	15	59	LOOSE_SAND	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	75	15	59	LOOSE_SAND	20	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	75	15	59	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	75	15	59	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	75	15	59	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table D-25. Maximum Sustainable Speed, Clear Sky, 75% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	75	20	68	BLACK_TOP	-50	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Clear_Sky	75	20	68	BLACK_TOP	-40	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Clear_Sky	75	20	68	BLACK_TOP	-30	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Clear_Sky	75	20	68	BLACK_TOP	-20	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Clear_Sky	75	20	68	BLACK_TOP	-15	1.15	1.30	1.45	4.1	4.7	5.2	2.6	2.9	3.2
Clear_Sky	75	20	68	BLACK_TOP	-10	1.20	1.40	1.55	4.3	5.0	5.6	2.7	3.1	3.5
Clear_Sky	75	20	68	BLACK_TOP	-5	1.30	1.50	1.65	4.7	5.4	5.9	2.9	3.4	3.7
Clear_Sky	75	20	68	BLACK_TOP	0	1.45	1.60	1.80	5.2	5.8	6.5	3.2	3.6	4.0
Clear_Sky	75	20	68	BLACK_TOP	5	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Clear_Sky	75	20	68	BLACK_TOP	10	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Clear_Sky	75	20	68	BLACK_TOP	15	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Clear_Sky	75	20	68	BLACK_TOP	20	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	75	20	68	BLACK_TOP	30	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Clear_Sky	75	20	68	BLACK_TOP	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	75	20	68	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	75	20	68	DIRT_ROAD	-50	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Clear_Sky	75	20	68	DIRT_ROAD	-40	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Clear_Sky	75	20	68	DIRT_ROAD	-30	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Clear_Sky	75	20	68	DIRT_ROAD	-20	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Clear_Sky	75	20	68	DIRT_ROAD	-15	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Clear_Sky	75	20	68	DIRT_ROAD	-10	1.15	1.30	1.50	4.1	4.7	5.4	2.6	2.9	3.4
Clear_Sky	75	20	68	DIRT_ROAD	-5	1.25	1.45	1.60	4.5	5.2	5.8	2.8	3.2	3.6
Clear_Sky	75	20	68	DIRT_ROAD	0	1.35	1.55	1.70	4.9	5.6	6.1	3.0	3.5	3.8
Clear_Sky	75	20	68	DIRT_ROAD	5	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Clear_Sky	75	20	68	DIRT_ROAD	10	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Clear_Sky	75	20	68	DIRT_ROAD	15	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Clear_Sky	75	20	68	DIRT_ROAD	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Clear_Sky	75	20	68	DIRT_ROAD	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	75	20	68	DIRT_ROAD	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	75	20	68	DIRT_ROAD	50	0.15	0.20	0.20	0.5	0.7	0.7	0.3	0.4	0.4
Clear_Sky	75	20	68	LOOSE_SAND	-50	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Clear_Sky	75	20	68	LOOSE_SAND	-40	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	75	20	68	LOOSE_SAND	-30	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Clear_Sky	75	20	68	LOOSE_SAND	-20	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Clear_Sky	75	20	68	LOOSE_SAND	-15	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Clear_Sky	75	20	68	LOOSE_SAND	-10	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Clear_Sky	75	20	68	LOOSE_SAND	-5	0.85	1.00	1.10	3.1	3.6	4.0	1.9	2.2	2.5
Clear_Sky	75	20	68	LOOSE_SAND	0	1.00	1.10	1.20	3.6	4.0	4.3	2.2	2.5	2.7
Clear_Sky	75	20	68	LOOSE_SAND	5	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Clear_Sky	75	20	68	LOOSE_SAND	10	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Clear_Sky	75	20	68	LOOSE_SAND	15	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	75	20	68	LOOSE_SAND	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	75	20	68	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	75	20	68	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	75	20	68	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table D-26. Maximum Sustainable Speed, Clear Sky, 75% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	75	25	77	BLACK_TOP	-50	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Clear_Sky	75	25	77	BLACK_TOP	-40	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Clear_Sky	75	25	77	BLACK_TOP	-30	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Clear_Sky	75	25	77	BLACK_TOP	-20	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Clear_Sky	75	25	77	BLACK_TOP	-15	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Clear_Sky	75	25	77	BLACK_TOP	-10	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Clear_Sky	75	25	77	BLACK_TOP	-5	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Clear_Sky	75	25	77	BLACK_TOP	0	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Clear_Sky	75	25	77	BLACK_TOP	5	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Clear_Sky	75	25	77	BLACK_TOP	10	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Clear_Sky	75	25	77	BLACK_TOP	15	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Clear_Sky	75	25	77	BLACK_TOP	20	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Clear_Sky	75	25	77	BLACK_TOP	30	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Clear_Sky	75	25	77	BLACK_TOP	40	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	75	25	77	BLACK_TOP	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Clear_Sky	75	25	77	DIRT_ROAD	-50	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Clear_Sky	75	25	77	DIRT_ROAD	-40	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Clear_Sky	75	25	77	DIRT_ROAD	-30	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Clear_Sky	75	25	77	DIRT_ROAD	-20	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Clear_Sky	75	25	77	DIRT_ROAD	-15	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Clear_Sky	75	25	77	DIRT_ROAD	-10	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Clear_Sky	75	25	77	DIRT_ROAD	-5	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Clear_Sky	75	25	77	DIRT_ROAD	0	1.15	1.25	1.40	4.1	4.5	5.0	2.6	2.8	3.1
Clear_Sky	75	25	77	DIRT_ROAD	5	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Clear_Sky	75	25	77	DIRT_ROAD	10	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Clear_Sky	75	25	77	DIRT_ROAD	15	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Clear_Sky	75	25	77	DIRT_ROAD	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	75	25	77	DIRT_ROAD	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	75	25	77	DIRT_ROAD	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	75	25	77	DIRT_ROAD	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	75	25	77	LOOSE_SAND	-50	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	75	25	77	LOOSE_SAND	-40	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Clear_Sky	75	25	77	LOOSE_SAND	-30	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Clear_Sky	75	25	77	LOOSE_SAND	-20	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Clear_Sky	75	25	77	LOOSE_SAND	-15	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Clear_Sky	75	25	77	LOOSE_SAND	-10	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Clear_Sky	75	25	77	LOOSE_SAND	-5	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Clear_Sky	75	25	77	LOOSE_SAND	0	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Clear_Sky	75	25	77	LOOSE_SAND	5	0.40	0.50	0.55	1.4	1.8	2.0	0.9	1.1	1.2
Clear_Sky	75	25	77	LOOSE_SAND	10	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	75	25	77	LOOSE_SAND	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	75	25	77	LOOSE_SAND	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	75	25	77	LOOSE_SAND	30	0.10	0.10	0.10	0.4	0.4	0.4	0.2	0.2	0.2
Clear_Sky	75	25	77	LOOSE_SAND	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	75	25	77	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table D-27. Maximum Sustainable Speed, Clear Sky, 75% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	75	30	86	BLACK_TOP	-50	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	75	30	86	BLACK_TOP	-40	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	75	30	86	BLACK_TOP	-30	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Clear_Sky	75	30	86	BLACK_TOP	-20	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Clear_Sky	75	30	86	BLACK_TOP	-15	0.50	0.55	0.75	1.8	2.0	2.7	1.1	1.2	1.7
Clear_Sky	75	30	86	BLACK_TOP	-10	0.55	0.65	0.85	2.0	2.3	3.1	1.2	1.5	1.9
Clear_Sky	75	30	86	BLACK_TOP	-5	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Clear_Sky	75	30	86	BLACK_TOP	0	0.75	0.85	1.05	2.7	3.1	3.8	1.7	1.9	2.4
Clear_Sky	75	30	86	BLACK_TOP	5	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Clear_Sky	75	30	86	BLACK_TOP	10	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	75	30	86	BLACK_TOP	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	75	30	86	BLACK_TOP	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	75	30	86	BLACK_TOP	30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Clear_Sky	75	30	86	BLACK_TOP	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	75	30	86	BLACK_TOP	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Clear_Sky	75	30	86	DIRT_ROAD	-50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	75	30	86	DIRT_ROAD	-40	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Clear_Sky	75	30	86	DIRT_ROAD	-30	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Clear_Sky	75	30	86	DIRT_ROAD	-20	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Clear_Sky	75	30	86	DIRT_ROAD	-15	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Clear_Sky	75	30	86	DIRT_ROAD	-10	0.55	0.60	0.80	2.0	2.2	2.9	1.2	1.3	1.8
Clear_Sky	75	30	86	DIRT_ROAD	-5	0.60	0.70	0.90	2.2	2.5	3.2	1.3	1.6	2.0
Clear_Sky	75	30	86	DIRT_ROAD	0	0.70	0.80	1.00	2.5	2.9	3.6	1.6	1.8	2.2
Clear_Sky	75	30	86	DIRT_ROAD	5	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Clear_Sky	75	30	86	DIRT_ROAD	10	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	75	30	86	DIRT_ROAD	15	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Clear_Sky	75	30	86	DIRT_ROAD	20	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Clear_Sky	75	30	86	DIRT_ROAD	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	75	30	86	DIRT_ROAD	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	75	30	86	DIRT_ROAD	50	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Clear_Sky	75	30	86	LOOSE_SAND	-50	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Clear_Sky	75	30	86	LOOSE_SAND	-40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Clear_Sky	75	30	86	LOOSE_SAND	-30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Clear_Sky	75	30	86	LOOSE_SAND	-20	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Clear_Sky	75	30	86	LOOSE_SAND	-15	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Clear_Sky	75	30	86	LOOSE_SAND	-10	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Clear_Sky	75	30	86	LOOSE_SAND	-5	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Clear_Sky	75	30	86	LOOSE_SAND	0	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Clear_Sky	75	30	86	LOOSE_SAND	5	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	75	30	86	LOOSE_SAND	10	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Clear_Sky	75	30	86	LOOSE_SAND	15	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	75	30	86	LOOSE_SAND	20	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	75	30	86	LOOSE_SAND	30	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Clear_Sky	75	30	86	LOOSE_SAND	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	75	30	86	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table D-28. Maximum Sustainable Speed, Clear Sky, 75% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	75	35	95	BLACK_TOP	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	BLACK_TOP	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	DIRT_ROAD	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	75	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table D-29. Maximum Sustainable Speed, Clear Sky, 95% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	95	5	41	BLACK_TOP	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Clear_Sky	95	5	41	BLACK_TOP	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Clear_Sky	95	5	41	BLACK_TOP	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Clear_Sky	95	5	41	BLACK_TOP	-20	1.35	1.65	1.95	4.9	5.9	7.0	3.0	3.7	4.4
Clear_Sky	95	5	41	BLACK_TOP	-15	1.45	1.75	2.05	5.2	6.3	7.4	3.2	3.9	4.6
Clear_Sky	95	5	41	BLACK_TOP	-10	1.55	1.85	2.15	5.6	6.7	7.7	3.5	4.1	4.8
Clear_Sky	95	5	41	BLACK_TOP	-5	1.65	1.95	2.25	5.9	7.0	8.1	3.7	4.4	5.0
Clear_Sky	95	5	41	BLACK_TOP	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Clear_Sky	95	5	41	BLACK_TOP	5	1.30	1.55	1.85	4.7	5.6	6.7	2.9	3.5	4.1
Clear_Sky	95	5	41	BLACK_TOP	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Clear_Sky	95	5	41	BLACK_TOP	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Clear_Sky	95	5	41	BLACK_TOP	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Clear_Sky	95	5	41	BLACK_TOP	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Clear_Sky	95	5	41	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Clear_Sky	95	5	41	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	95	5	41	DIRT_ROAD	-50	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Clear_Sky	95	5	41	DIRT_ROAD	-40	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Clear_Sky	95	5	41	DIRT_ROAD	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Clear_Sky	95	5	41	DIRT_ROAD	-20	1.30	1.55	1.85	4.7	5.6	6.7	2.9	3.5	4.1
Clear_Sky	95	5	41	DIRT_ROAD	-15	1.40	1.65	1.95	5.0	5.9	7.0	3.1	3.7	4.4
Clear_Sky	95	5	41	DIRT_ROAD	-10	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Clear_Sky	95	5	41	DIRT_ROAD	-5	1.60	1.85	2.15	5.8	6.7	7.7	3.6	4.1	4.8
Clear_Sky	95	5	41	DIRT_ROAD	0	1.70	1.95	2.25	6.1	7.0	8.1	3.8	4.4	5.0
Clear_Sky	95	5	41	DIRT_ROAD	5	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Clear_Sky	95	5	41	DIRT_ROAD	10	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Clear_Sky	95	5	41	DIRT_ROAD	15	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Clear_Sky	95	5	41	DIRT_ROAD	20	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Clear_Sky	95	5	41	DIRT_ROAD	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Clear_Sky	95	5	41	DIRT_ROAD	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	95	5	41	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	95	5	41	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	95	5	41	LOOSE_SAND	-40	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Clear_Sky	95	5	41	LOOSE_SAND	-30	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Clear_Sky	95	5	41	LOOSE_SAND	-20	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Clear_Sky	95	5	41	LOOSE_SAND	-15	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Clear_Sky	95	5	41	LOOSE_SAND	-10	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Clear_Sky	95	5	41	LOOSE_SAND	-5	1.10	1.30	1.55	4.0	4.7	5.6	2.5	2.9	3.5
Clear_Sky	95	5	41	LOOSE_SAND	0	1.20	1.40	1.65	4.3	5.0	5.9	2.7	3.1	3.7
Clear_Sky	95	5	41	LOOSE_SAND	5	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Clear_Sky	95	5	41	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Clear_Sky	95	5	41	LOOSE_SAND	15	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Clear_Sky	95	5	41	LOOSE_SAND	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	95	5	41	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	95	5	41	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	95	5	41	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table D-30. Maximum Sustainable Speed, Clear Sky, 95% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	95	10	50	BLACK_TOP	-50	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Clear_Sky	95	10	50	BLACK_TOP	-40	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Clear_Sky	95	10	50	BLACK_TOP	-30	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Clear_Sky	95	10	50	BLACK_TOP	-20	1.25	1.55	1.75	4.5	5.6	6.3	2.8	3.5	3.9
Clear_Sky	95	10	50	BLACK_TOP	-15	1.35	1.65	1.85	4.9	5.9	6.7	3.0	3.7	4.1
Clear_Sky	95	10	50	BLACK_TOP	-10	1.45	1.75	1.95	5.2	6.3	7.0	3.2	3.9	4.4
Clear_Sky	95	10	50	BLACK_TOP	-5	1.55	1.85	2.05	5.6	6.7	7.4	3.5	4.1	4.6
Clear_Sky	95	10	50	BLACK_TOP	0	1.65	1.95	2.20	5.9	7.0	7.9	3.7	4.4	4.9
Clear_Sky	95	10	50	BLACK_TOP	5	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Clear_Sky	95	10	50	BLACK_TOP	10	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Clear_Sky	95	10	50	BLACK_TOP	15	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Clear_Sky	95	10	50	BLACK_TOP	20	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Clear_Sky	95	10	50	BLACK_TOP	30	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Clear_Sky	95	10	50	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	95	10	50	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Clear_Sky	95	10	50	DIRT_ROAD	-50	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Clear_Sky	95	10	50	DIRT_ROAD	-40	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Clear_Sky	95	10	50	DIRT_ROAD	-30	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Clear_Sky	95	10	50	DIRT_ROAD	-20	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Clear_Sky	95	10	50	DIRT_ROAD	-15	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Clear_Sky	95	10	50	DIRT_ROAD	-10	1.35	1.65	1.85	4.9	5.9	6.7	3.0	3.7	4.1
Clear_Sky	95	10	50	DIRT_ROAD	-5	1.50	1.75	1.95	5.4	6.3	7.0	3.4	3.9	4.4
Clear_Sky	95	10	50	DIRT_ROAD	0	1.60	1.85	2.10	5.8	6.7	7.6	3.6	4.1	4.7
Clear_Sky	95	10	50	DIRT_ROAD	5	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Clear_Sky	95	10	50	DIRT_ROAD	10	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Clear_Sky	95	10	50	DIRT_ROAD	15	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Clear_Sky	95	10	50	DIRT_ROAD	20	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Clear_Sky	95	10	50	DIRT_ROAD	30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Clear_Sky	95	10	50	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	95	10	50	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Clear_Sky	95	10	50	LOOSE_SAND	-50	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Clear_Sky	95	10	50	LOOSE_SAND	-40	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Clear_Sky	95	10	50	LOOSE_SAND	-30	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Clear_Sky	95	10	50	LOOSE_SAND	-20	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Clear_Sky	95	10	50	LOOSE_SAND	-15	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Clear_Sky	95	10	50	LOOSE_SAND	-10	0.95	1.10	1.30	3.4	4.0	4.7	2.1	2.5	2.9
Clear_Sky	95	10	50	LOOSE_SAND	-5	1.05	1.20	1.40	3.8	4.3	5.0	2.4	2.7	3.1
Clear_Sky	95	10	50	LOOSE_SAND	0	1.15	1.35	1.50	4.1	4.9	5.4	2.6	3.0	3.4
Clear_Sky	95	10	50	LOOSE_SAND	5	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Clear_Sky	95	10	50	LOOSE_SAND	10	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Clear_Sky	95	10	50	LOOSE_SAND	15	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Clear_Sky	95	10	50	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Clear_Sky	95	10	50	LOOSE_SAND	30	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Clear_Sky	95	10	50	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	95	10	50	LOOSE_SAND	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3

Table D-31. Maximum Sustainable Speed, Clear Sky, 95 % Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	95	15	59	BLACK_TOP	-50	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Clear_Sky	95	15	59	BLACK_TOP	-40	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Clear_Sky	95	15	59	BLACK_TOP	-30	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Clear_Sky	95	15	59	BLACK_TOP	-20	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Clear_Sky	95	15	59	BLACK_TOP	-15	1.25	1.45	1.65	4.5	5.2	5.9	2.8	3.2	3.7
Clear_Sky	95	15	59	BLACK_TOP	-10	1.35	1.55	1.75	4.9	5.6	6.3	3.0	3.5	3.9
Clear_Sky	95	15	59	BLACK_TOP	-5	1.45	1.65	1.85	5.2	5.9	6.7	3.2	3.7	4.1
Clear_Sky	95	15	59	BLACK_TOP	0	1.55	1.80	1.95	5.6	6.5	7.0	3.5	4.0	4.4
Clear_Sky	95	15	59	BLACK_TOP	5	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Clear_Sky	95	15	59	BLACK_TOP	10	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Clear_Sky	95	15	59	BLACK_TOP	15	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Clear_Sky	95	15	59	BLACK_TOP	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Clear_Sky	95	15	59	BLACK_TOP	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Clear_Sky	95	15	59	BLACK_TOP	40	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Clear_Sky	95	15	59	BLACK_TOP	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	95	15	59	DIRT_ROAD	-50	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Clear_Sky	95	15	59	DIRT_ROAD	-40	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Clear_Sky	95	15	59	DIRT_ROAD	-30	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Clear_Sky	95	15	59	DIRT_ROAD	-20	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Clear_Sky	95	15	59	DIRT_ROAD	-15	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Clear_Sky	95	15	59	DIRT_ROAD	-10	1.25	1.50	1.65	4.5	5.4	5.9	2.8	3.4	3.7
Clear_Sky	95	15	59	DIRT_ROAD	-5	1.35	1.60	1.75	4.9	5.8	6.3	3.0	3.6	3.9
Clear_Sky	95	15	59	DIRT_ROAD	0	1.45	1.70	1.85	5.2	6.1	6.7	3.2	3.8	4.1
Clear_Sky	95	15	59	DIRT_ROAD	5	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Clear_Sky	95	15	59	DIRT_ROAD	10	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Clear_Sky	95	15	59	DIRT_ROAD	15	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Clear_Sky	95	15	59	DIRT_ROAD	20	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Clear_Sky	95	15	59	DIRT_ROAD	30	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Clear_Sky	95	15	59	DIRT_ROAD	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	95	15	59	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	95	15	59	LOOSE_SAND	-50	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	95	15	59	LOOSE_SAND	-40	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Clear_Sky	95	15	59	LOOSE_SAND	-30	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Clear_Sky	95	15	59	LOOSE_SAND	-20	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Clear_Sky	95	15	59	LOOSE_SAND	-15	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Clear_Sky	95	15	59	LOOSE_SAND	-10	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Clear_Sky	95	15	59	LOOSE_SAND	-5	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Clear_Sky	95	15	59	LOOSE_SAND	0	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Clear_Sky	95	15	59	LOOSE_SAND	5	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Clear_Sky	95	15	59	LOOSE_SAND	10	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	95	15	59	LOOSE_SAND	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Clear_Sky	95	15	59	LOOSE_SAND	20	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Clear_Sky	95	15	59	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	95	15	59	LOOSE_SAND	40	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Clear_Sky	95	15	59	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table D-32. Maximum Sustainable Speed, Clear Sky, 95% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	95	20	68	BLACK_TOP	-50	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Clear_Sky	95	20	68	BLACK_TOP	-40	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Clear_Sky	95	20	68	BLACK_TOP	-30	0.90	0.95	1.10	3.2	3.4	4.0	2.0	2.1	2.5
Clear_Sky	95	20	68	BLACK_TOP	-20	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Clear_Sky	95	20	68	BLACK_TOP	-15	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Clear_Sky	95	20	68	BLACK_TOP	-10	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Clear_Sky	95	20	68	BLACK_TOP	-5	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Clear_Sky	95	20	68	BLACK_TOP	0	1.40	1.50	1.65	5.0	5.4	5.9	3.1	3.4	3.7
Clear_Sky	95	20	68	BLACK_TOP	5	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Clear_Sky	95	20	68	BLACK_TOP	10	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Clear_Sky	95	20	68	BLACK_TOP	15	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Clear_Sky	95	20	68	BLACK_TOP	20	0.40	0.45	0.50	1.4	1.6	1.8	0.9	1.0	1.1
Clear_Sky	95	20	68	BLACK_TOP	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Clear_Sky	95	20	68	BLACK_TOP	40	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Clear_Sky	95	20	68	BLACK_TOP	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	95	20	68	DIRT_ROAD	-50	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Clear_Sky	95	20	68	DIRT_ROAD	-40	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Clear_Sky	95	20	68	DIRT_ROAD	-30	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Clear_Sky	95	20	68	DIRT_ROAD	-20	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Clear_Sky	95	20	68	DIRT_ROAD	-15	1.05	1.15	1.25	3.8	4.1	4.5	2.4	2.6	2.8
Clear_Sky	95	20	68	DIRT_ROAD	-10	1.15	1.20	1.35	4.1	4.3	4.9	2.6	2.7	3.0
Clear_Sky	95	20	68	DIRT_ROAD	-5	1.25	1.35	1.45	4.5	4.9	5.2	2.8	3.0	3.2
Clear_Sky	95	20	68	DIRT_ROAD	0	1.35	1.45	1.60	4.9	5.2	5.8	3.0	3.2	3.6
Clear_Sky	95	20	68	DIRT_ROAD	5	0.90	0.95	1.10	3.2	3.4	4.0	2.0	2.1	2.5
Clear_Sky	95	20	68	DIRT_ROAD	10	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Clear_Sky	95	20	68	DIRT_ROAD	15	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Clear_Sky	95	20	68	DIRT_ROAD	20	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Clear_Sky	95	20	68	DIRT_ROAD	30	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Clear_Sky	95	20	68	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Clear_Sky	95	20	68	DIRT_ROAD	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	95	20	68	LOOSE_SAND	-50	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Clear_Sky	95	20	68	LOOSE_SAND	-40	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Clear_Sky	95	20	68	LOOSE_SAND	-30	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Clear_Sky	95	20	68	LOOSE_SAND	-20	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Clear_Sky	95	20	68	LOOSE_SAND	-15	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Clear_Sky	95	20	68	LOOSE_SAND	-10	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Clear_Sky	95	20	68	LOOSE_SAND	-5	0.85	0.90	1.05	3.1	3.2	3.8	1.9	2.0	2.4
Clear_Sky	95	20	68	LOOSE_SAND	0	0.95	1.05	1.15	3.4	3.8	4.1	2.1	2.4	2.6
Clear_Sky	95	20	68	LOOSE_SAND	5	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Clear_Sky	95	20	68	LOOSE_SAND	10	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Clear_Sky	95	20	68	LOOSE_SAND	15	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Clear_Sky	95	20	68	LOOSE_SAND	20	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Clear_Sky	95	20	68	LOOSE_SAND	30	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Clear_Sky	95	20	68	LOOSE_SAND	40	0.10	0.10	0.10	0.4	0.4	0.4	0.2	0.2	0.2
Clear_Sky	95	20	68	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table D-33. Maximum Sustainable Speed, Clear Sky, 95% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	95	25	77	BLACK_TOP	-50	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Clear_Sky	95	25	77	BLACK_TOP	-40	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Clear_Sky	95	25	77	BLACK_TOP	-30	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Clear_Sky	95	25	77	BLACK_TOP	-20	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Clear_Sky	95	25	77	BLACK_TOP	-15	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Clear_Sky	95	25	77	BLACK_TOP	-10	0.85	0.90	1.10	3.1	3.2	4.0	1.9	2.0	2.5
Clear_Sky	95	25	77	BLACK_TOP	-5	0.95	1.00	1.20	3.4	3.6	4.3	2.1	2.2	2.7
Clear_Sky	95	25	77	BLACK_TOP	0	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Clear_Sky	95	25	77	BLACK_TOP	5	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Clear_Sky	95	25	77	BLACK_TOP	10	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Clear_Sky	95	25	77	BLACK_TOP	15	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Clear_Sky	95	25	77	BLACK_TOP	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Clear_Sky	95	25	77	BLACK_TOP	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Clear_Sky	95	25	77	BLACK_TOP	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	95	25	77	BLACK_TOP	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	95	25	77	DIRT_ROAD	-50	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Clear_Sky	95	25	77	DIRT_ROAD	-40	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Clear_Sky	95	25	77	DIRT_ROAD	-30	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Clear_Sky	95	25	77	DIRT_ROAD	-20	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Clear_Sky	95	25	77	DIRT_ROAD	-15	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Clear_Sky	95	25	77	DIRT_ROAD	-10	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Clear_Sky	95	25	77	DIRT_ROAD	-5	0.90	0.95	1.10	3.2	3.4	4.0	2.0	2.1	2.5
Clear_Sky	95	25	77	DIRT_ROAD	0	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Clear_Sky	95	25	77	DIRT_ROAD	5	0.55	0.65	0.80	2.0	2.3	2.9	1.2	1.5	1.8
Clear_Sky	95	25	77	DIRT_ROAD	10	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Clear_Sky	95	25	77	DIRT_ROAD	15	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Clear_Sky	95	25	77	DIRT_ROAD	20	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Clear_Sky	95	25	77	DIRT_ROAD	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	95	25	77	DIRT_ROAD	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	95	25	77	DIRT_ROAD	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Clear_Sky	95	25	77	LOOSE_SAND	-50	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Clear_Sky	95	25	77	LOOSE_SAND	-40	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Clear_Sky	95	25	77	LOOSE_SAND	-30	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Clear_Sky	95	25	77	LOOSE_SAND	-20	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Clear_Sky	95	25	77	LOOSE_SAND	-15	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Clear_Sky	95	25	77	LOOSE_SAND	-10	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Clear_Sky	95	25	77	LOOSE_SAND	-5	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Clear_Sky	95	25	77	LOOSE_SAND	0	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Clear_Sky	95	25	77	LOOSE_SAND	5	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Clear_Sky	95	25	77	LOOSE_SAND	10	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Clear_Sky	95	25	77	LOOSE_SAND	15	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Clear_Sky	95	25	77	LOOSE_SAND	20	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Clear_Sky	95	25	77	LOOSE_SAND	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Clear_Sky	95	25	77	LOOSE_SAND	40	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Clear_Sky	95	25	77	LOOSE_SAND	50	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1

Table D-34. Maximum Sustainable Speed, Clear Sky, 95% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	95	30	86	BLACK_TOP	-50	0.00	0.05	0.20	0.0	0.2	0.7	0.0	0.1	0.4
Clear_Sky	95	30	86	BLACK_TOP	-40	0.00	0.10	0.25	0.0	0.4	0.9	0.0	0.2	0.6
Clear_Sky	95	30	86	BLACK_TOP	-30	0.00	0.10	0.30	0.0	0.4	1.1	0.0	0.2	0.7
Clear_Sky	95	30	86	BLACK_TOP	-20	0.05	0.20	0.40	0.2	0.7	1.4	0.1	0.4	0.9
Clear_Sky	95	30	86	BLACK_TOP	-15	0.05	0.20	0.45	0.2	0.7	1.6	0.1	0.4	1.0
Clear_Sky	95	30	86	BLACK_TOP	-10	0.10	0.30	0.50	0.4	1.1	1.8	0.2	0.7	1.1
Clear_Sky	95	30	86	BLACK_TOP	-5	0.15	0.35	0.60	0.5	1.3	2.2	0.3	0.8	1.3
Clear_Sky	95	30	86	BLACK_TOP	0	0.25	0.45	0.70	0.9	1.6	2.5	0.6	1.0	1.6
Clear_Sky	95	30	86	BLACK_TOP	5	0.05	0.15	0.35	0.2	0.5	1.3	0.1	0.3	0.8
Clear_Sky	95	30	86	BLACK_TOP	10	0.00	0.05	0.20	0.0	0.2	0.7	0.0	0.1	0.4
Clear_Sky	95	30	86	BLACK_TOP	15	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Clear_Sky	95	30	86	BLACK_TOP	20	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Clear_Sky	95	30	86	BLACK_TOP	30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	95	30	86	BLACK_TOP	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	95	30	86	BLACK_TOP	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	30	86	DIRT_ROAD	-50	0.00	0.05	0.15	0.0	0.2	0.5	0.0	0.1	0.3
Clear_Sky	95	30	86	DIRT_ROAD	-40	0.00	0.10	0.20	0.0	0.4	0.7	0.0	0.2	0.4
Clear_Sky	95	30	86	DIRT_ROAD	-30	0.00	0.10	0.25	0.0	0.4	0.9	0.0	0.2	0.6
Clear_Sky	95	30	86	DIRT_ROAD	-20	0.05	0.15	0.35	0.2	0.5	1.3	0.1	0.3	0.8
Clear_Sky	95	30	86	DIRT_ROAD	-15	0.05	0.20	0.40	0.2	0.7	1.4	0.1	0.4	0.9
Clear_Sky	95	30	86	DIRT_ROAD	-10	0.10	0.25	0.50	0.4	0.9	1.8	0.2	0.6	1.1
Clear_Sky	95	30	86	DIRT_ROAD	-5	0.15	0.35	0.55	0.5	1.3	2.0	0.3	0.8	1.2
Clear_Sky	95	30	86	DIRT_ROAD	0	0.25	0.45	0.65	0.9	1.6	2.3	0.6	1.0	1.5
Clear_Sky	95	30	86	DIRT_ROAD	5	0.05	0.15	0.30	0.2	0.5	1.1	0.1	0.3	0.7
Clear_Sky	95	30	86	DIRT_ROAD	10	0.00	0.05	0.15	0.0	0.2	0.5	0.0	0.1	0.3
Clear_Sky	95	30	86	DIRT_ROAD	15	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Clear_Sky	95	30	86	DIRT_ROAD	20	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Clear_Sky	95	30	86	DIRT_ROAD	30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	95	30	86	DIRT_ROAD	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	95	30	86	DIRT_ROAD	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	30	86	LOOSE_SAND	-50	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Clear_Sky	95	30	86	LOOSE_SAND	-40	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Clear_Sky	95	30	86	LOOSE_SAND	-30	0.00	0.05	0.15	0.0	0.2	0.5	0.0	0.1	0.3
Clear_Sky	95	30	86	LOOSE_SAND	-20	0.00	0.10	0.20	0.0	0.4	0.7	0.0	0.2	0.4
Clear_Sky	95	30	86	LOOSE_SAND	-15	0.00	0.10	0.25	0.0	0.4	0.9	0.0	0.2	0.6
Clear_Sky	95	30	86	LOOSE_SAND	-10	0.05	0.15	0.30	0.2	0.5	1.1	0.1	0.3	0.7
Clear_Sky	95	30	86	LOOSE_SAND	-5	0.05	0.20	0.40	0.2	0.7	1.4	0.1	0.4	0.9
Clear_Sky	95	30	86	LOOSE_SAND	0	0.15	0.30	0.50	0.5	1.1	1.8	0.3	0.7	1.1
Clear_Sky	95	30	86	LOOSE_SAND	5	0.00	0.05	0.15	0.0	0.2	0.5	0.0	0.1	0.3
Clear_Sky	95	30	86	LOOSE_SAND	10	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Clear_Sky	95	30	86	LOOSE_SAND	15	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	95	30	86	LOOSE_SAND	20	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Clear_Sky	95	30	86	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	30	86	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	30	86	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table D-35. Maximum Sustainable Speed, Clear Sky, 95% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Clear_Sky	95	35	95	BLACK_TOP	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	BLACK_TOP	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	DIRT_ROAD	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Clear_Sky	95	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Appendix E

Maximum Sustainable Speed Tables, Cloudy

Table E-1. Maximum Sustainable Speed, Cloudy, 5% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	5	5	41	BLACK_TOP	-50	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	5	5	41	BLACK_TOP	-40	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Cloudy	5	5	41	BLACK_TOP	-30	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Cloudy	5	5	41	BLACK_TOP	-20	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	5	5	41	BLACK_TOP	-15	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Cloudy	5	5	41	BLACK_TOP	-10	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Cloudy	5	5	41	BLACK_TOP	-5	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Cloudy	5	5	41	BLACK_TOP	0	1.90	2.20	2.50	6.8	7.9	9.0	4.3	4.9	5.6
Cloudy	5	5	41	BLACK_TOP	5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Cloudy	5	5	41	BLACK_TOP	10	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	5	5	41	BLACK_TOP	15	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Cloudy	5	5	41	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Cloudy	5	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	5	5	41	BLACK_TOP	40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Cloudy	5	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	5	5	41	DIRT_ROAD	-50	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Cloudy	5	5	41	DIRT_ROAD	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Cloudy	5	5	41	DIRT_ROAD	-30	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Cloudy	5	5	41	DIRT_ROAD	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	5	5	41	DIRT_ROAD	-15	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	5	5	41	DIRT_ROAD	-10	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Cloudy	5	5	41	DIRT_ROAD	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Cloudy	5	5	41	DIRT_ROAD	0	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Cloudy	5	5	41	DIRT_ROAD	5	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Cloudy	5	5	41	DIRT_ROAD	10	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Cloudy	5	5	41	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	5	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Cloudy	5	5	41	DIRT_ROAD	30	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Cloudy	5	5	41	DIRT_ROAD	40	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Cloudy	5	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	5	5	41	LOOSE_SAND	-50	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Cloudy	5	5	41	LOOSE_SAND	-40	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Cloudy	5	5	41	LOOSE_SAND	-30	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Cloudy	5	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	5	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	5	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Cloudy	5	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Cloudy	5	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Cloudy	5	5	41	LOOSE_SAND	5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Cloudy	5	5	41	LOOSE_SAND	10	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Cloudy	5	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	5	5	41	LOOSE_SAND	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	5	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	5	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	5	5	41	LOOSE_SAND	50	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6

Table E-2. Maximum Sustainable Speed, Cloudy, 5% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	5	10	50	BLACK_TOP	-50	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Cloudy	5	10	50	BLACK_TOP	-40	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Cloudy	5	10	50	BLACK_TOP	-30	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	5	10	50	BLACK_TOP	-20	1.40	1.70	2.10	5.0	6.1	7.6	3.1	3.8	4.7
Cloudy	5	10	50	BLACK_TOP	-15	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Cloudy	5	10	50	BLACK_TOP	-10	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Cloudy	5	10	50	BLACK_TOP	-5	1.70	2.00	2.40	6.1	7.2	8.6	3.8	4.5	5.4
Cloudy	5	10	50	BLACK_TOP	0	1.85	2.10	2.50	6.7	7.6	9.0	4.1	4.7	5.6
Cloudy	5	10	50	BLACK_TOP	5	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Cloudy	5	10	50	BLACK_TOP	10	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Cloudy	5	10	50	BLACK_TOP	15	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Cloudy	5	10	50	BLACK_TOP	20	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Cloudy	5	10	50	BLACK_TOP	30	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Cloudy	5	10	50	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	5	10	50	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	5	10	50	DIRT_ROAD	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Cloudy	5	10	50	DIRT_ROAD	-40	1.05	1.25	1.65	3.8	4.5	5.9	2.4	2.8	3.7
Cloudy	5	10	50	DIRT_ROAD	-30	1.20	1.40	1.80	4.3	5.0	6.5	2.7	3.1	4.0
Cloudy	5	10	50	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Cloudy	5	10	50	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Cloudy	5	10	50	DIRT_ROAD	-10	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Cloudy	5	10	50	DIRT_ROAD	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Cloudy	5	10	50	DIRT_ROAD	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Cloudy	5	10	50	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	5	10	50	DIRT_ROAD	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Cloudy	5	10	50	DIRT_ROAD	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Cloudy	5	10	50	DIRT_ROAD	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Cloudy	5	10	50	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Cloudy	5	10	50	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	5	10	50	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Cloudy	5	10	50	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	5	10	50	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Cloudy	5	10	50	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Cloudy	5	10	50	LOOSE_SAND	-20	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Cloudy	5	10	50	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Cloudy	5	10	50	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Cloudy	5	10	50	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Cloudy	5	10	50	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Cloudy	5	10	50	LOOSE_SAND	5	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Cloudy	5	10	50	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	5	10	50	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Cloudy	5	10	50	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	5	10	50	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Cloudy	5	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	5	10	50	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table E-3. Maximum Sustainable Speed, Cloudy, 5% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	5	15	59	BLACK_TOP	-50	0.90	1.15	1.55	3.2	4.1	5.6	2.0	2.6	3.5
Cloudy	5	15	59	BLACK_TOP	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Cloudy	5	15	59	BLACK_TOP	-30	1.15	1.45	1.85	4.1	5.2	6.7	2.6	3.2	4.1
Cloudy	5	15	59	BLACK_TOP	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Cloudy	5	15	59	BLACK_TOP	-15	1.40	1.70	2.10	5.0	6.1	7.6	3.1	3.8	4.7
Cloudy	5	15	59	BLACK_TOP	-10	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Cloudy	5	15	59	BLACK_TOP	-5	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Cloudy	5	15	59	BLACK_TOP	0	1.75	2.00	2.45	6.3	7.2	8.8	3.9	4.5	5.5
Cloudy	5	15	59	BLACK_TOP	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	5	15	59	BLACK_TOP	10	0.90	1.15	1.55	3.2	4.1	5.6	2.0	2.6	3.5
Cloudy	5	15	59	BLACK_TOP	15	0.70	0.90	1.25	2.5	3.2	4.5	1.6	2.0	2.8
Cloudy	5	15	59	BLACK_TOP	20	0.55	0.75	1.05	2.0	2.7	3.8	1.2	1.7	2.4
Cloudy	5	15	59	BLACK_TOP	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Cloudy	5	15	59	BLACK_TOP	40	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Cloudy	5	15	59	BLACK_TOP	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Cloudy	5	15	59	DIRT_ROAD	-50	0.85	1.05	1.45	3.1	3.8	5.2	1.9	2.4	3.2
Cloudy	5	15	59	DIRT_ROAD	-40	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Cloudy	5	15	59	DIRT_ROAD	-30	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Cloudy	5	15	59	DIRT_ROAD	-20	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	5	15	59	DIRT_ROAD	-15	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Cloudy	5	15	59	DIRT_ROAD	-10	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Cloudy	5	15	59	DIRT_ROAD	-5	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Cloudy	5	15	59	DIRT_ROAD	0	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Cloudy	5	15	59	DIRT_ROAD	5	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Cloudy	5	15	59	DIRT_ROAD	10	0.85	1.05	1.45	3.1	3.8	5.2	1.9	2.4	3.2
Cloudy	5	15	59	DIRT_ROAD	15	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Cloudy	5	15	59	DIRT_ROAD	20	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Cloudy	5	15	59	DIRT_ROAD	30	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Cloudy	5	15	59	DIRT_ROAD	40	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Cloudy	5	15	59	DIRT_ROAD	50	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Cloudy	5	15	59	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	5	15	59	LOOSE_SAND	-40	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Cloudy	5	15	59	LOOSE_SAND	-30	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Cloudy	5	15	59	LOOSE_SAND	-20	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Cloudy	5	15	59	LOOSE_SAND	-15	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Cloudy	5	15	59	LOOSE_SAND	-10	1.00	1.15	1.45	3.6	4.1	5.2	2.2	2.6	3.2
Cloudy	5	15	59	LOOSE_SAND	-5	1.10	1.25	1.55	4.0	4.5	5.6	2.5	2.8	3.5
Cloudy	5	15	59	LOOSE_SAND	0	1.20	1.40	1.65	4.3	5.0	5.9	2.7	3.1	3.7
Cloudy	5	15	59	LOOSE_SAND	5	0.75	0.90	1.20	2.7	3.2	4.3	1.7	2.0	2.7
Cloudy	5	15	59	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	5	15	59	LOOSE_SAND	15	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	5	15	59	LOOSE_SAND	20	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Cloudy	5	15	59	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	5	15	59	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	5	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table E-4. Maximum Sustainable Speed, Cloudy, 5% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	5	20	68	BLACK_TOP	-50	0.85	1.05	1.40	3.1	3.8	5.0	1.9	2.4	3.1
Cloudy	5	20	68	BLACK_TOP	-40	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Cloudy	5	20	68	BLACK_TOP	-30	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Cloudy	5	20	68	BLACK_TOP	-20	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	5	20	68	BLACK_TOP	-15	1.30	1.60	2.00	4.7	5.8	7.2	2.9	3.6	4.5
Cloudy	5	20	68	BLACK_TOP	-10	1.40	1.70	2.10	5.0	6.1	7.6	3.1	3.8	4.7
Cloudy	5	20	68	BLACK_TOP	-5	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Cloudy	5	20	68	BLACK_TOP	0	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Cloudy	5	20	68	BLACK_TOP	5	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Cloudy	5	20	68	BLACK_TOP	10	0.85	1.05	1.40	3.1	3.8	5.0	1.9	2.4	3.1
Cloudy	5	20	68	BLACK_TOP	15	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Cloudy	5	20	68	BLACK_TOP	20	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Cloudy	5	20	68	BLACK_TOP	30	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Cloudy	5	20	68	BLACK_TOP	40	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Cloudy	5	20	68	BLACK_TOP	50	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Cloudy	5	20	68	DIRT_ROAD	-50	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Cloudy	5	20	68	DIRT_ROAD	-40	0.90	1.10	1.45	3.2	4.0	5.2	2.0	2.5	3.2
Cloudy	5	20	68	DIRT_ROAD	-30	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Cloudy	5	20	68	DIRT_ROAD	-20	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Cloudy	5	20	68	DIRT_ROAD	-15	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	5	20	68	DIRT_ROAD	-10	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Cloudy	5	20	68	DIRT_ROAD	-5	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Cloudy	5	20	68	DIRT_ROAD	0	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Cloudy	5	20	68	DIRT_ROAD	5	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Cloudy	5	20	68	DIRT_ROAD	10	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Cloudy	5	20	68	DIRT_ROAD	15	0.60	0.75	1.05	2.2	2.7	3.8	1.3	1.7	2.4
Cloudy	5	20	68	DIRT_ROAD	20	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Cloudy	5	20	68	DIRT_ROAD	30	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Cloudy	5	20	68	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	5	20	68	DIRT_ROAD	50	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Cloudy	5	20	68	LOOSE_SAND	-50	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	5	20	68	LOOSE_SAND	-40	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Cloudy	5	20	68	LOOSE_SAND	-30	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Cloudy	5	20	68	LOOSE_SAND	-20	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	5	20	68	LOOSE_SAND	-15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Cloudy	5	20	68	LOOSE_SAND	-10	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	5	20	68	LOOSE_SAND	-5	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Cloudy	5	20	68	LOOSE_SAND	0	1.10	1.30	1.60	4.0	4.7	5.8	2.5	2.9	3.6
Cloudy	5	20	68	LOOSE_SAND	5	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Cloudy	5	20	68	LOOSE_SAND	10	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	5	20	68	LOOSE_SAND	15	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Cloudy	5	20	68	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	5	20	68	LOOSE_SAND	30	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Cloudy	5	20	68	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Cloudy	5	20	68	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table E-5. Maximum Sustainable Speed, Cloudy, 5% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	5	25	77	BLACK_TOP	-50	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Cloudy	5	25	77	BLACK_TOP	-40	0.85	1.10	1.45	3.1	4.0	5.2	1.9	2.5	3.2
Cloudy	5	25	77	BLACK_TOP	-30	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Cloudy	5	25	77	BLACK_TOP	-20	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	5	25	77	BLACK_TOP	-15	1.20	1.50	1.85	4.3	5.4	6.7	2.7	3.4	4.1
Cloudy	5	25	77	BLACK_TOP	-10	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Cloudy	5	25	77	BLACK_TOP	-5	1.40	1.70	2.05	5.0	6.1	7.4	3.1	3.8	4.6
Cloudy	5	25	77	BLACK_TOP	0	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Cloudy	5	25	77	BLACK_TOP	5	1.05	1.35	1.65	3.8	4.9	5.9	2.4	3.0	3.7
Cloudy	5	25	77	BLACK_TOP	10	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Cloudy	5	25	77	BLACK_TOP	15	0.55	0.75	1.05	2.0	2.7	3.8	1.2	1.7	2.4
Cloudy	5	25	77	BLACK_TOP	20	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Cloudy	5	25	77	BLACK_TOP	30	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Cloudy	5	25	77	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	5	25	77	BLACK_TOP	50	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Cloudy	5	25	77	DIRT_ROAD	-50	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Cloudy	5	25	77	DIRT_ROAD	-40	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Cloudy	5	25	77	DIRT_ROAD	-30	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Cloudy	5	25	77	DIRT_ROAD	-20	1.05	1.35	1.65	3.8	4.9	5.9	2.4	3.0	3.7
Cloudy	5	25	77	DIRT_ROAD	-15	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	5	25	77	DIRT_ROAD	-10	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Cloudy	5	25	77	DIRT_ROAD	-5	1.35	1.60	1.95	4.9	5.8	7.0	3.0	3.6	4.4
Cloudy	5	25	77	DIRT_ROAD	0	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Cloudy	5	25	77	DIRT_ROAD	5	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Cloudy	5	25	77	DIRT_ROAD	10	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Cloudy	5	25	77	DIRT_ROAD	15	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Cloudy	5	25	77	DIRT_ROAD	20	0.40	0.55	0.80	1.4	2.0	2.9	0.9	1.2	1.8
Cloudy	5	25	77	DIRT_ROAD	30	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	5	25	77	DIRT_ROAD	40	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Cloudy	5	25	77	DIRT_ROAD	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Cloudy	5	25	77	LOOSE_SAND	-50	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	5	25	77	LOOSE_SAND	-40	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Cloudy	5	25	77	LOOSE_SAND	-30	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Cloudy	5	25	77	LOOSE_SAND	-20	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Cloudy	5	25	77	LOOSE_SAND	-15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	5	25	77	LOOSE_SAND	-10	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Cloudy	5	25	77	LOOSE_SAND	-5	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Cloudy	5	25	77	LOOSE_SAND	0	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Cloudy	5	25	77	LOOSE_SAND	5	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Cloudy	5	25	77	LOOSE_SAND	10	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	5	25	77	LOOSE_SAND	15	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	5	25	77	LOOSE_SAND	20	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Cloudy	5	25	77	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	5	25	77	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	5	25	77	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table E-6. Maximum Sustainable Speed, Cloudy, 5% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	5	30	86	BLACK_TOP	-50	0.65	0.90	1.20	2.3	3.2	4.3	1.5	2.0	2.7
Cloudy	5	30	86	BLACK_TOP	-40	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Cloudy	5	30	86	BLACK_TOP	-30	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Cloudy	5	30	86	BLACK_TOP	-20	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Cloudy	5	30	86	BLACK_TOP	-15	1.10	1.40	1.70	4.0	5.0	6.1	2.5	3.1	3.8
Cloudy	5	30	86	BLACK_TOP	-10	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Cloudy	5	30	86	BLACK_TOP	-5	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Cloudy	5	30	86	BLACK_TOP	0	1.45	1.70	2.05	5.2	6.1	7.4	3.2	3.8	4.6
Cloudy	5	30	86	BLACK_TOP	5	0.95	1.25	1.55	3.4	4.5	5.6	2.1	2.8	3.5
Cloudy	5	30	86	BLACK_TOP	10	0.65	0.90	1.20	2.3	3.2	4.3	1.5	2.0	2.7
Cloudy	5	30	86	BLACK_TOP	15	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Cloudy	5	30	86	BLACK_TOP	20	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	5	30	86	BLACK_TOP	30	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Cloudy	5	30	86	BLACK_TOP	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	5	30	86	BLACK_TOP	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Cloudy	5	30	86	DIRT_ROAD	-50	0.60	0.85	1.10	2.2	3.1	4.0	1.3	1.9	2.5
Cloudy	5	30	86	DIRT_ROAD	-40	0.70	0.95	1.20	2.5	3.4	4.3	1.6	2.1	2.7
Cloudy	5	30	86	DIRT_ROAD	-30	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Cloudy	5	30	86	DIRT_ROAD	-20	0.95	1.25	1.55	3.4	4.5	5.6	2.1	2.8	3.5
Cloudy	5	30	86	DIRT_ROAD	-15	1.05	1.35	1.65	3.8	4.9	5.9	2.4	3.0	3.7
Cloudy	5	30	86	DIRT_ROAD	-10	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	5	30	86	DIRT_ROAD	-5	1.25	1.55	1.85	4.5	5.6	6.7	2.8	3.5	4.1
Cloudy	5	30	86	DIRT_ROAD	0	1.35	1.65	1.95	4.9	5.9	7.0	3.0	3.7	4.4
Cloudy	5	30	86	DIRT_ROAD	5	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Cloudy	5	30	86	DIRT_ROAD	10	0.60	0.85	1.10	2.2	3.1	4.0	1.3	1.9	2.5
Cloudy	5	30	86	DIRT_ROAD	15	0.45	0.65	0.85	1.6	2.3	3.1	1.0	1.5	1.9
Cloudy	5	30	86	DIRT_ROAD	20	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Cloudy	5	30	86	DIRT_ROAD	30	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	5	30	86	DIRT_ROAD	40	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	5	30	86	DIRT_ROAD	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	5	30	86	LOOSE_SAND	-50	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Cloudy	5	30	86	LOOSE_SAND	-40	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	5	30	86	LOOSE_SAND	-30	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	5	30	86	LOOSE_SAND	-20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Cloudy	5	30	86	LOOSE_SAND	-15	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	5	30	86	LOOSE_SAND	-10	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	5	30	86	LOOSE_SAND	-5	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Cloudy	5	30	86	LOOSE_SAND	0	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	5	30	86	LOOSE_SAND	5	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Cloudy	5	30	86	LOOSE_SAND	10	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Cloudy	5	30	86	LOOSE_SAND	15	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	5	30	86	LOOSE_SAND	20	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Cloudy	5	30	86	LOOSE_SAND	30	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Cloudy	5	30	86	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	5	30	86	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table E-7. Maximum Sustainable Speed, Cloudy, 5% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	5	35	95	BLACK_TOP	-50	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Cloudy	5	35	95	BLACK_TOP	-40	0.65	0.95	1.20	2.3	3.4	4.3	1.5	2.1	2.7
Cloudy	5	35	95	BLACK_TOP	-30	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Cloudy	5	35	95	BLACK_TOP	-20	0.90	1.20	1.50	3.2	4.3	5.4	2.0	2.7	3.4
Cloudy	5	35	95	BLACK_TOP	-15	1.00	1.30	1.60	3.6	4.7	5.8	2.2	2.9	3.6
Cloudy	5	35	95	BLACK_TOP	-10	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Cloudy	5	35	95	BLACK_TOP	-5	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Cloudy	5	35	95	BLACK_TOP	0	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Cloudy	5	35	95	BLACK_TOP	5	0.85	1.15	1.40	3.1	4.1	5.0	1.9	2.6	3.1
Cloudy	5	35	95	BLACK_TOP	10	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Cloudy	5	35	95	BLACK_TOP	15	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Cloudy	5	35	95	BLACK_TOP	20	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Cloudy	5	35	95	BLACK_TOP	30	0.20	0.35	0.45	0.7	1.3	1.6	0.4	0.8	1.0
Cloudy	5	35	95	BLACK_TOP	40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Cloudy	5	35	95	BLACK_TOP	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	5	35	95	DIRT_ROAD	-50	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Cloudy	5	35	95	DIRT_ROAD	-40	0.60	0.85	1.10	2.2	3.1	4.0	1.3	1.9	2.5
Cloudy	5	35	95	DIRT_ROAD	-30	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Cloudy	5	35	95	DIRT_ROAD	-20	0.85	1.15	1.40	3.1	4.1	5.0	1.9	2.6	3.1
Cloudy	5	35	95	DIRT_ROAD	-15	0.95	1.25	1.50	3.4	4.5	5.4	2.1	2.8	3.4
Cloudy	5	35	95	DIRT_ROAD	-10	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Cloudy	5	35	95	DIRT_ROAD	-5	1.15	1.45	1.70	4.1	5.2	6.1	2.6	3.2	3.8
Cloudy	5	35	95	DIRT_ROAD	0	1.25	1.55	1.80	4.5	5.6	6.5	2.8	3.5	4.0
Cloudy	5	35	95	DIRT_ROAD	5	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Cloudy	5	35	95	DIRT_ROAD	10	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Cloudy	5	35	95	DIRT_ROAD	15	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	5	35	95	DIRT_ROAD	20	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Cloudy	5	35	95	DIRT_ROAD	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	5	35	95	DIRT_ROAD	40	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Cloudy	5	35	95	DIRT_ROAD	50	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Cloudy	5	35	95	LOOSE_SAND	-50	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Cloudy	5	35	95	LOOSE_SAND	-40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Cloudy	5	35	95	LOOSE_SAND	-30	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Cloudy	5	35	95	LOOSE_SAND	-20	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Cloudy	5	35	95	LOOSE_SAND	-15	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Cloudy	5	35	95	LOOSE_SAND	-10	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	5	35	95	LOOSE_SAND	-5	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Cloudy	5	35	95	LOOSE_SAND	0	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Cloudy	5	35	95	LOOSE_SAND	5	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	5	35	95	LOOSE_SAND	10	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Cloudy	5	35	95	LOOSE_SAND	15	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	5	35	95	LOOSE_SAND	20	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Cloudy	5	35	95	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	5	35	95	LOOSE_SAND	40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Cloudy	5	35	95	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table E-8. Maximum Sustainable Speed, Cloudy, 25% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	25	5	41	BLACK_TOP	-50	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	25	5	41	BLACK_TOP	-40	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Cloudy	25	5	41	BLACK_TOP	-30	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Cloudy	25	5	41	BLACK_TOP	-20	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	25	5	41	BLACK_TOP	-15	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Cloudy	25	5	41	BLACK_TOP	-10	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Cloudy	25	5	41	BLACK_TOP	-5	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Cloudy	25	5	41	BLACK_TOP	0	1.90	2.20	2.50	6.8	7.9	9.0	4.3	4.9	5.6
Cloudy	25	5	41	BLACK_TOP	5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Cloudy	25	5	41	BLACK_TOP	10	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	25	5	41	BLACK_TOP	15	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Cloudy	25	5	41	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Cloudy	25	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	25	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	25	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	25	5	41	DIRT_ROAD	-50	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Cloudy	25	5	41	DIRT_ROAD	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Cloudy	25	5	41	DIRT_ROAD	-30	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Cloudy	25	5	41	DIRT_ROAD	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	25	5	41	DIRT_ROAD	-15	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	25	5	41	DIRT_ROAD	-10	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Cloudy	25	5	41	DIRT_ROAD	-5	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Cloudy	25	5	41	DIRT_ROAD	0	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Cloudy	25	5	41	DIRT_ROAD	5	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Cloudy	25	5	41	DIRT_ROAD	10	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Cloudy	25	5	41	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	25	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Cloudy	25	5	41	DIRT_ROAD	30	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Cloudy	25	5	41	DIRT_ROAD	40	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Cloudy	25	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	25	5	41	LOOSE_SAND	-50	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Cloudy	25	5	41	LOOSE_SAND	-40	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Cloudy	25	5	41	LOOSE_SAND	-30	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Cloudy	25	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	25	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	25	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Cloudy	25	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Cloudy	25	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Cloudy	25	5	41	LOOSE_SAND	5	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Cloudy	25	5	41	LOOSE_SAND	10	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Cloudy	25	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	25	5	41	LOOSE_SAND	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	25	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	25	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	25	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table E-9. Maximum Sustainable Speed, Cloudy, 25% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	25	10	50	BLACK_TOP	-50	1.00	1.20	1.60	3.6	4.3	5.8	2.2	2.7	3.6
Cloudy	25	10	50	BLACK_TOP	-40	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Cloudy	25	10	50	BLACK_TOP	-30	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	25	10	50	BLACK_TOP	-20	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Cloudy	25	10	50	BLACK_TOP	-15	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Cloudy	25	10	50	BLACK_TOP	-10	1.60	1.85	2.30	5.8	6.7	8.3	3.6	4.1	5.2
Cloudy	25	10	50	BLACK_TOP	-5	1.70	2.00	2.40	6.1	7.2	8.6	3.8	4.5	5.4
Cloudy	25	10	50	BLACK_TOP	0	1.80	2.10	2.50	6.5	7.6	9.0	4.0	4.7	5.6
Cloudy	25	10	50	BLACK_TOP	5	1.30	1.60	2.00	4.7	5.8	7.2	2.9	3.6	4.5
Cloudy	25	10	50	BLACK_TOP	10	1.00	1.20	1.60	3.6	4.3	5.8	2.2	2.7	3.6
Cloudy	25	10	50	BLACK_TOP	15	0.75	0.95	1.30	2.7	3.4	4.7	1.7	2.1	2.9
Cloudy	25	10	50	BLACK_TOP	20	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Cloudy	25	10	50	BLACK_TOP	30	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Cloudy	25	10	50	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	25	10	50	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	25	10	50	DIRT_ROAD	-50	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Cloudy	25	10	50	DIRT_ROAD	-40	1.05	1.25	1.65	3.8	4.5	5.9	2.4	2.8	3.7
Cloudy	25	10	50	DIRT_ROAD	-30	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Cloudy	25	10	50	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Cloudy	25	10	50	DIRT_ROAD	-15	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Cloudy	25	10	50	DIRT_ROAD	-10	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Cloudy	25	10	50	DIRT_ROAD	-5	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Cloudy	25	10	50	DIRT_ROAD	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Cloudy	25	10	50	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Cloudy	25	10	50	DIRT_ROAD	10	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Cloudy	25	10	50	DIRT_ROAD	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Cloudy	25	10	50	DIRT_ROAD	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Cloudy	25	10	50	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Cloudy	25	10	50	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	25	10	50	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Cloudy	25	10	50	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	25	10	50	LOOSE_SAND	-40	0.60	0.75	1.05	2.2	2.7	3.8	1.3	1.7	2.4
Cloudy	25	10	50	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Cloudy	25	10	50	LOOSE_SAND	-20	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Cloudy	25	10	50	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Cloudy	25	10	50	LOOSE_SAND	-10	1.05	1.20	1.50	3.8	4.3	5.4	2.4	2.7	3.4
Cloudy	25	10	50	LOOSE_SAND	-5	1.15	1.30	1.60	4.1	4.7	5.8	2.6	2.9	3.6
Cloudy	25	10	50	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Cloudy	25	10	50	LOOSE_SAND	5	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Cloudy	25	10	50	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	25	10	50	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Cloudy	25	10	50	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	25	10	50	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Cloudy	25	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	25	10	50	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table E-10. Maximum Sustainable Speed, Cloudy, 25% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	25	15	59	BLACK_TOP	-50	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Cloudy	25	15	59	BLACK_TOP	-40	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Cloudy	25	15	59	BLACK_TOP	-30	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	25	15	59	BLACK_TOP	-20	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Cloudy	25	15	59	BLACK_TOP	-15	1.40	1.65	2.05	5.0	5.9	7.4	3.1	3.7	4.6
Cloudy	25	15	59	BLACK_TOP	-10	1.50	1.75	2.15	5.4	6.3	7.7	3.4	3.9	4.8
Cloudy	25	15	59	BLACK_TOP	-5	1.60	1.90	2.25	5.8	6.8	8.1	3.6	4.3	5.0
Cloudy	25	15	59	BLACK_TOP	0	1.70	2.00	2.35	6.1	7.2	8.5	3.8	4.5	5.3
Cloudy	25	15	59	BLACK_TOP	5	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Cloudy	25	15	59	BLACK_TOP	10	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Cloudy	25	15	59	BLACK_TOP	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Cloudy	25	15	59	BLACK_TOP	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Cloudy	25	15	59	BLACK_TOP	30	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Cloudy	25	15	59	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	25	15	59	BLACK_TOP	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Cloudy	25	15	59	DIRT_ROAD	-50	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Cloudy	25	15	59	DIRT_ROAD	-40	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	25	15	59	DIRT_ROAD	-30	1.10	1.30	1.65	4.0	4.7	5.9	2.5	2.9	3.7
Cloudy	25	15	59	DIRT_ROAD	-20	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Cloudy	25	15	59	DIRT_ROAD	-15	1.30	1.60	1.95	4.7	5.8	7.0	2.9	3.6	4.4
Cloudy	25	15	59	DIRT_ROAD	-10	1.40	1.70	2.05	5.0	6.1	7.4	3.1	3.8	4.6
Cloudy	25	15	59	DIRT_ROAD	-5	1.55	1.80	2.15	5.6	6.5	7.7	3.5	4.0	4.8
Cloudy	25	15	59	DIRT_ROAD	0	1.65	1.90	2.25	5.9	6.8	8.1	3.7	4.3	5.0
Cloudy	25	15	59	DIRT_ROAD	5	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	25	15	59	DIRT_ROAD	10	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Cloudy	25	15	59	DIRT_ROAD	15	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Cloudy	25	15	59	DIRT_ROAD	20	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Cloudy	25	15	59	DIRT_ROAD	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	25	15	59	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	25	15	59	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	25	15	59	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	25	15	59	LOOSE_SAND	-40	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Cloudy	25	15	59	LOOSE_SAND	-30	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Cloudy	25	15	59	LOOSE_SAND	-20	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Cloudy	25	15	59	LOOSE_SAND	-15	0.90	1.05	1.30	3.2	3.8	4.7	2.0	2.4	2.9
Cloudy	25	15	59	LOOSE_SAND	-10	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Cloudy	25	15	59	LOOSE_SAND	-5	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Cloudy	25	15	59	LOOSE_SAND	0	1.20	1.35	1.65	4.3	4.9	5.9	2.7	3.0	3.7
Cloudy	25	15	59	LOOSE_SAND	5	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Cloudy	25	15	59	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	25	15	59	LOOSE_SAND	15	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	25	15	59	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	25	15	59	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	25	15	59	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	25	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table E-11. Maximum Sustainable Speed, Cloudy, 25% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	25	20	68	BLACK_TOP	-50	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Cloudy	25	20	68	BLACK_TOP	-40	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Cloudy	25	20	68	BLACK_TOP	-30	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	25	20	68	BLACK_TOP	-20	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Cloudy	25	20	68	BLACK_TOP	-15	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Cloudy	25	20	68	BLACK_TOP	-10	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Cloudy	25	20	68	BLACK_TOP	-5	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Cloudy	25	20	68	BLACK_TOP	0	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Cloudy	25	20	68	BLACK_TOP	5	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Cloudy	25	20	68	BLACK_TOP	10	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Cloudy	25	20	68	BLACK_TOP	15	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Cloudy	25	20	68	BLACK_TOP	20	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Cloudy	25	20	68	BLACK_TOP	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	25	20	68	BLACK_TOP	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	25	20	68	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	25	20	68	DIRT_ROAD	-50	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Cloudy	25	20	68	DIRT_ROAD	-40	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Cloudy	25	20	68	DIRT_ROAD	-30	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Cloudy	25	20	68	DIRT_ROAD	-20	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Cloudy	25	20	68	DIRT_ROAD	-15	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Cloudy	25	20	68	DIRT_ROAD	-10	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Cloudy	25	20	68	DIRT_ROAD	-5	1.45	1.70	2.00	5.2	6.1	7.2	3.2	3.8	4.5
Cloudy	25	20	68	DIRT_ROAD	0	1.55	1.80	2.10	5.6	6.5	7.6	3.5	4.0	4.7
Cloudy	25	20	68	DIRT_ROAD	5	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	25	20	68	DIRT_ROAD	10	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Cloudy	25	20	68	DIRT_ROAD	15	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Cloudy	25	20	68	DIRT_ROAD	20	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	25	20	68	DIRT_ROAD	30	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Cloudy	25	20	68	DIRT_ROAD	40	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Cloudy	25	20	68	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	25	20	68	LOOSE_SAND	-50	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Cloudy	25	20	68	LOOSE_SAND	-40	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	25	20	68	LOOSE_SAND	-30	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Cloudy	25	20	68	LOOSE_SAND	-20	0.75	0.90	1.10	2.7	3.2	4.0	1.7	2.0	2.5
Cloudy	25	20	68	LOOSE_SAND	-15	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Cloudy	25	20	68	LOOSE_SAND	-10	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Cloudy	25	20	68	LOOSE_SAND	-5	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	25	20	68	LOOSE_SAND	0	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Cloudy	25	20	68	LOOSE_SAND	5	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Cloudy	25	20	68	LOOSE_SAND	10	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Cloudy	25	20	68	LOOSE_SAND	15	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	25	20	68	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	25	20	68	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	25	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	25	20	68	LOOSE_SAND	50	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4

Table E-12. Maximum Sustainable Speed, Cloudy, 25% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	25	25	77	BLACK_TOP	-50	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	25	25	77	BLACK_TOP	-40	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Cloudy	25	25	77	BLACK_TOP	-30	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Cloudy	25	25	77	BLACK_TOP	-20	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Cloudy	25	25	77	BLACK_TOP	-15	1.20	1.50	1.70	4.3	5.4	6.1	2.7	3.4	3.8
Cloudy	25	25	77	BLACK_TOP	-10	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Cloudy	25	25	77	BLACK_TOP	-5	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Cloudy	25	25	77	BLACK_TOP	0	1.50	1.80	2.05	5.4	6.5	7.4	3.4	4.0	4.6
Cloudy	25	25	77	BLACK_TOP	5	1.05	1.30	1.55	3.8	4.7	5.6	2.4	2.9	3.5
Cloudy	25	25	77	BLACK_TOP	10	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	25	25	77	BLACK_TOP	15	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Cloudy	25	25	77	BLACK_TOP	20	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Cloudy	25	25	77	BLACK_TOP	30	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	25	25	77	BLACK_TOP	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	25	25	77	BLACK_TOP	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Cloudy	25	25	77	DIRT_ROAD	-50	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	25	25	77	DIRT_ROAD	-40	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Cloudy	25	25	77	DIRT_ROAD	-30	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Cloudy	25	25	77	DIRT_ROAD	-20	1.05	1.30	1.55	3.8	4.7	5.6	2.4	2.9	3.5
Cloudy	25	25	77	DIRT_ROAD	-15	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Cloudy	25	25	77	DIRT_ROAD	-10	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Cloudy	25	25	77	DIRT_ROAD	-5	1.30	1.60	1.85	4.7	5.8	6.7	2.9	3.6	4.1
Cloudy	25	25	77	DIRT_ROAD	0	1.45	1.70	1.95	5.2	6.1	7.0	3.2	3.8	4.4
Cloudy	25	25	77	DIRT_ROAD	5	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Cloudy	25	25	77	DIRT_ROAD	10	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	25	25	77	DIRT_ROAD	15	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Cloudy	25	25	77	DIRT_ROAD	20	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	25	25	77	DIRT_ROAD	30	0.25	0.40	0.50	0.9	1.4	1.8	0.6	0.9	1.1
Cloudy	25	25	77	DIRT_ROAD	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	25	25	77	DIRT_ROAD	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Cloudy	25	25	77	LOOSE_SAND	-50	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	25	25	77	LOOSE_SAND	-40	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Cloudy	25	25	77	LOOSE_SAND	-30	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Cloudy	25	25	77	LOOSE_SAND	-20	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Cloudy	25	25	77	LOOSE_SAND	-15	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Cloudy	25	25	77	LOOSE_SAND	-10	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Cloudy	25	25	77	LOOSE_SAND	-5	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Cloudy	25	25	77	LOOSE_SAND	0	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Cloudy	25	25	77	LOOSE_SAND	5	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Cloudy	25	25	77	LOOSE_SAND	10	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	25	25	77	LOOSE_SAND	15	0.25	0.40	0.50	0.9	1.4	1.8	0.6	0.9	1.1
Cloudy	25	25	77	LOOSE_SAND	20	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	25	25	77	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	25	25	77	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	25	25	77	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table E-13. Maximum Sustainable Speed, Cloudy, 25 % Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	25	30	86	BLACK_TOP	-50	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Cloudy	25	30	86	BLACK_TOP	-40	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	25	30	86	BLACK_TOP	-30	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Cloudy	25	30	86	BLACK_TOP	-20	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Cloudy	25	30	86	BLACK_TOP	-15	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Cloudy	25	30	86	BLACK_TOP	-10	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Cloudy	25	30	86	BLACK_TOP	-5	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Cloudy	25	30	86	BLACK_TOP	0	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Cloudy	25	30	86	BLACK_TOP	5	0.95	1.20	1.35	3.4	4.3	4.9	2.1	2.7	3.0
Cloudy	25	30	86	BLACK_TOP	10	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Cloudy	25	30	86	BLACK_TOP	15	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Cloudy	25	30	86	BLACK_TOP	20	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Cloudy	25	30	86	BLACK_TOP	30	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	25	30	86	BLACK_TOP	40	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	25	30	86	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	25	30	86	DIRT_ROAD	-50	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Cloudy	25	30	86	DIRT_ROAD	-40	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Cloudy	25	30	86	DIRT_ROAD	-30	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Cloudy	25	30	86	DIRT_ROAD	-20	0.95	1.20	1.35	3.4	4.3	4.9	2.1	2.7	3.0
Cloudy	25	30	86	DIRT_ROAD	-15	1.00	1.30	1.45	3.6	4.7	5.2	2.2	2.9	3.2
Cloudy	25	30	86	DIRT_ROAD	-10	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Cloudy	25	30	86	DIRT_ROAD	-5	1.20	1.50	1.65	4.3	5.4	5.9	2.7	3.4	3.7
Cloudy	25	30	86	DIRT_ROAD	0	1.35	1.60	1.75	4.9	5.8	6.3	3.0	3.6	3.9
Cloudy	25	30	86	DIRT_ROAD	5	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Cloudy	25	30	86	DIRT_ROAD	10	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Cloudy	25	30	86	DIRT_ROAD	15	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Cloudy	25	30	86	DIRT_ROAD	20	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Cloudy	25	30	86	DIRT_ROAD	30	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Cloudy	25	30	86	DIRT_ROAD	40	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Cloudy	25	30	86	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	25	30	86	LOOSE_SAND	-50	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	25	30	86	LOOSE_SAND	-40	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Cloudy	25	30	86	LOOSE_SAND	-30	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Cloudy	25	30	86	LOOSE_SAND	-20	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Cloudy	25	30	86	LOOSE_SAND	-15	0.65	0.85	0.95	2.3	3.1	3.4	1.5	1.9	2.1
Cloudy	25	30	86	LOOSE_SAND	-10	0.75	0.95	1.05	2.7	3.4	3.8	1.7	2.1	2.4
Cloudy	25	30	86	LOOSE_SAND	-5	0.85	1.05	1.15	3.1	3.8	4.1	1.9	2.4	2.6
Cloudy	25	30	86	LOOSE_SAND	0	0.95	1.15	1.25	3.4	4.1	4.5	2.1	2.6	2.8
Cloudy	25	30	86	LOOSE_SAND	5	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Cloudy	25	30	86	LOOSE_SAND	10	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	25	30	86	LOOSE_SAND	15	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Cloudy	25	30	86	LOOSE_SAND	20	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Cloudy	25	30	86	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	25	30	86	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	25	30	86	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table E-14. Maximum Sustainable Speed, Cloudy, 25% Humidity, 35°C (91°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	25	35	95	BLACK_TOP	-50	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Cloudy	25	35	95	BLACK_TOP	-40	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Cloudy	25	35	95	BLACK_TOP	-30	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Cloudy	25	35	95	BLACK_TOP	-20	0.90	1.05	1.25	3.2	3.8	4.5	2.0	2.4	2.8
Cloudy	25	35	95	BLACK_TOP	-15	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Cloudy	25	35	95	BLACK_TOP	-10	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Cloudy	25	35	95	BLACK_TOP	-5	1.15	1.35	1.50	4.1	4.9	5.4	2.6	3.0	3.4
Cloudy	25	35	95	BLACK_TOP	0	1.25	1.45	1.65	4.5	5.2	5.9	2.8	3.2	3.7
Cloudy	25	35	95	BLACK_TOP	5	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Cloudy	25	35	95	BLACK_TOP	10	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Cloudy	25	35	95	BLACK_TOP	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	25	35	95	BLACK_TOP	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	25	35	95	BLACK_TOP	30	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	25	35	95	BLACK_TOP	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	25	35	95	BLACK_TOP	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	25	35	95	DIRT_ROAD	-50	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Cloudy	25	35	95	DIRT_ROAD	-40	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Cloudy	25	35	95	DIRT_ROAD	-30	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Cloudy	25	35	95	DIRT_ROAD	-20	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Cloudy	25	35	95	DIRT_ROAD	-15	0.90	1.10	1.25	3.2	4.0	4.5	2.0	2.5	2.8
Cloudy	25	35	95	DIRT_ROAD	-10	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Cloudy	25	35	95	DIRT_ROAD	-5	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Cloudy	25	35	95	DIRT_ROAD	0	1.20	1.40	1.55	4.3	5.0	5.6	2.7	3.1	3.5
Cloudy	25	35	95	DIRT_ROAD	5	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Cloudy	25	35	95	DIRT_ROAD	10	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Cloudy	25	35	95	DIRT_ROAD	15	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Cloudy	25	35	95	DIRT_ROAD	20	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	25	35	95	DIRT_ROAD	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	25	35	95	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	25	35	95	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	25	35	95	LOOSE_SAND	-50	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	25	35	95	LOOSE_SAND	-40	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Cloudy	25	35	95	LOOSE_SAND	-30	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Cloudy	25	35	95	LOOSE_SAND	-20	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Cloudy	25	35	95	LOOSE_SAND	-15	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	25	35	95	LOOSE_SAND	-10	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Cloudy	25	35	95	LOOSE_SAND	-5	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Cloudy	25	35	95	LOOSE_SAND	0	0.85	1.00	1.10	3.1	3.6	4.0	1.9	2.2	2.5
Cloudy	25	35	95	LOOSE_SAND	5	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Cloudy	25	35	95	LOOSE_SAND	10	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	25	35	95	LOOSE_SAND	15	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	25	35	95	LOOSE_SAND	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	25	35	95	LOOSE_SAND	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	25	35	95	LOOSE_SAND	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Cloudy	25	35	95	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table E-15. Maximum Sustainable Speed, Cloudy, 50% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	50	5	41	BLACK_TOP	-50	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	50	5	41	BLACK_TOP	-40	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Cloudy	50	5	41	BLACK_TOP	-30	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Cloudy	50	5	41	BLACK_TOP	-20	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	50	5	41	BLACK_TOP	-15	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Cloudy	50	5	41	BLACK_TOP	-10	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Cloudy	50	5	41	BLACK_TOP	-5	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Cloudy	50	5	41	BLACK_TOP	0	1.90	2.15	2.50	6.8	7.7	9.0	4.3	4.8	5.6
Cloudy	50	5	41	BLACK_TOP	5	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	50	5	41	BLACK_TOP	10	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	50	5	41	BLACK_TOP	15	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Cloudy	50	5	41	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Cloudy	50	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	50	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	50	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	50	5	41	DIRT_ROAD	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	50	5	41	DIRT_ROAD	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Cloudy	50	5	41	DIRT_ROAD	-30	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Cloudy	50	5	41	DIRT_ROAD	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	50	5	41	DIRT_ROAD	-15	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	50	5	41	DIRT_ROAD	-10	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Cloudy	50	5	41	DIRT_ROAD	-5	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Cloudy	50	5	41	DIRT_ROAD	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Cloudy	50	5	41	DIRT_ROAD	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Cloudy	50	5	41	DIRT_ROAD	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	50	5	41	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	50	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Cloudy	50	5	41	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	50	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	50	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	50	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	50	5	41	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Cloudy	50	5	41	LOOSE_SAND	-30	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	50	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	50	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	50	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Cloudy	50	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Cloudy	50	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Cloudy	50	5	41	LOOSE_SAND	5	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Cloudy	50	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	50	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	50	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	50	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	50	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	50	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table E-16. Maximum Sustainable Speed, Cloudy, 50 % Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	50	10	50	BLACK_TOP	-50	1.00	1.20	1.55	3.6	4.3	5.6	2.2	2.7	3.5
Cloudy	50	10	50	BLACK_TOP	-40	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Cloudy	50	10	50	BLACK_TOP	-30	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Cloudy	50	10	50	BLACK_TOP	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	50	10	50	BLACK_TOP	-15	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	50	10	50	BLACK_TOP	-10	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Cloudy	50	10	50	BLACK_TOP	-5	1.70	1.95	2.35	6.1	7.0	8.5	3.8	4.4	5.3
Cloudy	50	10	50	BLACK_TOP	0	1.80	2.10	2.45	6.5	7.6	8.8	4.0	4.7	5.5
Cloudy	50	10	50	BLACK_TOP	5	1.30	1.55	1.95	4.7	5.6	7.0	2.9	3.5	4.4
Cloudy	50	10	50	BLACK_TOP	10	1.00	1.20	1.55	3.6	4.3	5.6	2.2	2.7	3.5
Cloudy	50	10	50	BLACK_TOP	15	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Cloudy	50	10	50	BLACK_TOP	20	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Cloudy	50	10	50	BLACK_TOP	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	50	10	50	BLACK_TOP	40	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Cloudy	50	10	50	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Cloudy	50	10	50	DIRT_ROAD	-50	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Cloudy	50	10	50	DIRT_ROAD	-40	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Cloudy	50	10	50	DIRT_ROAD	-30	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	50	10	50	DIRT_ROAD	-20	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Cloudy	50	10	50	DIRT_ROAD	-15	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	50	10	50	DIRT_ROAD	-10	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Cloudy	50	10	50	DIRT_ROAD	-5	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Cloudy	50	10	50	DIRT_ROAD	0	1.70	2.00	2.35	6.1	7.2	8.5	3.8	4.5	5.3
Cloudy	50	10	50	DIRT_ROAD	5	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Cloudy	50	10	50	DIRT_ROAD	10	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Cloudy	50	10	50	DIRT_ROAD	15	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Cloudy	50	10	50	DIRT_ROAD	20	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Cloudy	50	10	50	DIRT_ROAD	30	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Cloudy	50	10	50	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	50	10	50	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Cloudy	50	10	50	LOOSE_SAND	-50	0.55	0.65	0.90	2.0	2.3	3.2	1.2	1.5	2.0
Cloudy	50	10	50	LOOSE_SAND	-40	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Cloudy	50	10	50	LOOSE_SAND	-30	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	50	10	50	LOOSE_SAND	-20	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Cloudy	50	10	50	LOOSE_SAND	-15	0.95	1.10	1.35	3.4	4.0	4.9	2.1	2.5	3.0
Cloudy	50	10	50	LOOSE_SAND	-10	1.05	1.20	1.45	3.8	4.3	5.2	2.4	2.7	3.2
Cloudy	50	10	50	LOOSE_SAND	-5	1.15	1.30	1.55	4.1	4.7	5.6	2.6	2.9	3.5
Cloudy	50	10	50	LOOSE_SAND	0	1.25	1.40	1.70	4.5	5.0	6.1	2.8	3.1	3.8
Cloudy	50	10	50	LOOSE_SAND	5	0.80	0.95	1.20	2.9	3.4	4.3	1.8	2.1	2.7
Cloudy	50	10	50	LOOSE_SAND	10	0.55	0.65	0.90	2.0	2.3	3.2	1.2	1.5	2.0
Cloudy	50	10	50	LOOSE_SAND	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	50	10	50	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	50	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	50	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	50	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table E-17. Maximum Sustainable Speed, Cloudy, 50% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	50	15	59	BLACK_TOP	-50	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Cloudy	50	15	59	BLACK_TOP	-40	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Cloudy	50	15	59	BLACK_TOP	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Cloudy	50	15	59	BLACK_TOP	-20	1.30	1.55	1.85	4.7	5.6	6.7	2.9	3.5	4.1
Cloudy	50	15	59	BLACK_TOP	-15	1.40	1.65	1.95	5.0	5.9	7.0	3.1	3.7	4.4
Cloudy	50	15	59	BLACK_TOP	-10	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Cloudy	50	15	59	BLACK_TOP	-5	1.60	1.85	2.15	5.8	6.7	7.7	3.6	4.1	4.8
Cloudy	50	15	59	BLACK_TOP	0	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Cloudy	50	15	59	BLACK_TOP	5	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Cloudy	50	15	59	BLACK_TOP	10	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Cloudy	50	15	59	BLACK_TOP	15	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	50	15	59	BLACK_TOP	20	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	50	15	59	BLACK_TOP	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	50	15	59	BLACK_TOP	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	50	15	59	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	50	15	59	DIRT_ROAD	-50	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Cloudy	50	15	59	DIRT_ROAD	-40	0.95	1.15	1.45	3.4	4.1	5.2	2.1	2.6	3.2
Cloudy	50	15	59	DIRT_ROAD	-30	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	50	15	59	DIRT_ROAD	-20	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Cloudy	50	15	59	DIRT_ROAD	-15	1.30	1.55	1.85	4.7	5.6	6.7	2.9	3.5	4.1
Cloudy	50	15	59	DIRT_ROAD	-10	1.40	1.65	1.95	5.0	5.9	7.0	3.1	3.7	4.4
Cloudy	50	15	59	DIRT_ROAD	-5	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Cloudy	50	15	59	DIRT_ROAD	0	1.60	1.90	2.15	5.8	6.8	7.7	3.6	4.3	4.8
Cloudy	50	15	59	DIRT_ROAD	5	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Cloudy	50	15	59	DIRT_ROAD	10	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Cloudy	50	15	59	DIRT_ROAD	15	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Cloudy	50	15	59	DIRT_ROAD	20	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	50	15	59	DIRT_ROAD	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Cloudy	50	15	59	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	50	15	59	DIRT_ROAD	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	50	15	59	LOOSE_SAND	-50	0.50	0.60	0.80	1.8	2.2	2.9	1.1	1.3	1.8
Cloudy	50	15	59	LOOSE_SAND	-40	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	50	15	59	LOOSE_SAND	-30	0.65	0.80	1.00	2.3	2.9	3.6	1.5	1.8	2.2
Cloudy	50	15	59	LOOSE_SAND	-20	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Cloudy	50	15	59	LOOSE_SAND	-15	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Cloudy	50	15	59	LOOSE_SAND	-10	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Cloudy	50	15	59	LOOSE_SAND	-5	1.05	1.25	1.45	3.8	4.5	5.2	2.4	2.8	3.2
Cloudy	50	15	59	LOOSE_SAND	0	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Cloudy	50	15	59	LOOSE_SAND	5	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	50	15	59	LOOSE_SAND	10	0.50	0.60	0.80	1.8	2.2	2.9	1.1	1.3	1.8
Cloudy	50	15	59	LOOSE_SAND	15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Cloudy	50	15	59	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	50	15	59	LOOSE_SAND	30	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Cloudy	50	15	59	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Cloudy	50	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table E-18. Maximum Sustainable Speed, Cloudy, 50% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	50	20	68	BLACK_TOP	-50	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Cloudy	50	20	68	BLACK_TOP	-40	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Cloudy	50	20	68	BLACK_TOP	-30	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Cloudy	50	20	68	BLACK_TOP	-20	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Cloudy	50	20	68	BLACK_TOP	-15	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Cloudy	50	20	68	BLACK_TOP	-10	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Cloudy	50	20	68	BLACK_TOP	-5	1.50	1.75	1.95	5.4	6.3	7.0	3.4	3.9	4.4
Cloudy	50	20	68	BLACK_TOP	0	1.60	1.85	2.10	5.8	6.7	7.6	3.6	4.1	4.7
Cloudy	50	20	68	BLACK_TOP	5	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Cloudy	50	20	68	BLACK_TOP	10	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Cloudy	50	20	68	BLACK_TOP	15	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Cloudy	50	20	68	BLACK_TOP	20	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Cloudy	50	20	68	BLACK_TOP	30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	50	20	68	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	50	20	68	BLACK_TOP	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	50	20	68	DIRT_ROAD	-50	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	50	20	68	DIRT_ROAD	-40	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Cloudy	50	20	68	DIRT_ROAD	-30	0.95	1.20	1.40	3.4	4.3	5.0	2.1	2.7	3.1
Cloudy	50	20	68	DIRT_ROAD	-20	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Cloudy	50	20	68	DIRT_ROAD	-15	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Cloudy	50	20	68	DIRT_ROAD	-10	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Cloudy	50	20	68	DIRT_ROAD	-5	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Cloudy	50	20	68	DIRT_ROAD	0	1.50	1.80	2.00	5.4	6.5	7.2	3.4	4.0	4.5
Cloudy	50	20	68	DIRT_ROAD	5	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Cloudy	50	20	68	DIRT_ROAD	10	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	50	20	68	DIRT_ROAD	15	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Cloudy	50	20	68	DIRT_ROAD	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Cloudy	50	20	68	DIRT_ROAD	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	50	20	68	DIRT_ROAD	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	50	20	68	DIRT_ROAD	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	50	20	68	LOOSE_SAND	-50	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Cloudy	50	20	68	LOOSE_SAND	-40	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Cloudy	50	20	68	LOOSE_SAND	-30	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Cloudy	50	20	68	LOOSE_SAND	-20	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Cloudy	50	20	68	LOOSE_SAND	-15	0.80	1.00	1.10	2.9	3.6	4.0	1.8	2.2	2.5
Cloudy	50	20	68	LOOSE_SAND	-10	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Cloudy	50	20	68	LOOSE_SAND	-5	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Cloudy	50	20	68	LOOSE_SAND	0	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Cloudy	50	20	68	LOOSE_SAND	5	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Cloudy	50	20	68	LOOSE_SAND	10	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Cloudy	50	20	68	LOOSE_SAND	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	50	20	68	LOOSE_SAND	20	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	50	20	68	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	50	20	68	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table E-19. Maximum Sustainable Speed, Cloudy, 50% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	50	25	77	BLACK_TOP	-50	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Cloudy	50	25	77	BLACK_TOP	-40	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Cloudy	50	25	77	BLACK_TOP	-30	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Cloudy	50	25	77	BLACK_TOP	-20	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Cloudy	50	25	77	BLACK_TOP	-15	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Cloudy	50	25	77	BLACK_TOP	-10	1.25	1.50	1.65	4.5	5.4	5.9	2.8	3.4	3.7
Cloudy	50	25	77	BLACK_TOP	-5	1.35	1.60	1.75	4.9	5.8	6.3	3.0	3.6	3.9
Cloudy	50	25	77	BLACK_TOP	0	1.50	1.70	1.85	5.4	6.1	6.7	3.4	3.8	4.1
Cloudy	50	25	77	BLACK_TOP	5	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Cloudy	50	25	77	BLACK_TOP	10	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Cloudy	50	25	77	BLACK_TOP	15	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Cloudy	50	25	77	BLACK_TOP	20	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Cloudy	50	25	77	BLACK_TOP	30	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	50	25	77	BLACK_TOP	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	50	25	77	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	25	77	DIRT_ROAD	-50	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Cloudy	50	25	77	DIRT_ROAD	-40	0.75	0.95	1.05	2.7	3.4	3.8	1.7	2.1	2.4
Cloudy	50	25	77	DIRT_ROAD	-30	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Cloudy	50	25	77	DIRT_ROAD	-20	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Cloudy	50	25	77	DIRT_ROAD	-15	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Cloudy	50	25	77	DIRT_ROAD	-10	1.20	1.40	1.55	4.3	5.0	5.6	2.7	3.1	3.5
Cloudy	50	25	77	DIRT_ROAD	-5	1.30	1.50	1.65	4.7	5.4	5.9	2.9	3.4	3.7
Cloudy	50	25	77	DIRT_ROAD	0	1.40	1.60	1.80	5.0	5.8	6.5	3.1	3.6	4.0
Cloudy	50	25	77	DIRT_ROAD	5	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Cloudy	50	25	77	DIRT_ROAD	10	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Cloudy	50	25	77	DIRT_ROAD	15	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Cloudy	50	25	77	DIRT_ROAD	20	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Cloudy	50	25	77	DIRT_ROAD	30	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Cloudy	50	25	77	DIRT_ROAD	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	50	25	77	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	25	77	LOOSE_SAND	-50	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	50	25	77	LOOSE_SAND	-40	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Cloudy	50	25	77	LOOSE_SAND	-30	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Cloudy	50	25	77	LOOSE_SAND	-20	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Cloudy	50	25	77	LOOSE_SAND	-15	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Cloudy	50	25	77	LOOSE_SAND	-10	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Cloudy	50	25	77	LOOSE_SAND	-5	0.90	1.05	1.15	3.2	3.8	4.1	2.0	2.4	2.6
Cloudy	50	25	77	LOOSE_SAND	0	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Cloudy	50	25	77	LOOSE_SAND	5	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	50	25	77	LOOSE_SAND	10	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	50	25	77	LOOSE_SAND	15	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Cloudy	50	25	77	LOOSE_SAND	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	50	25	77	LOOSE_SAND	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	50	25	77	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	50	25	77	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table E-20. Maximum Sustainable Speed, Cloudy, 50% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	50	30	86	BLACK_TOP	-50	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	50	30	86	BLACK_TOP	-40	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Cloudy	50	30	86	BLACK_TOP	-30	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Cloudy	50	30	86	BLACK_TOP	-20	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Cloudy	50	30	86	BLACK_TOP	-15	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Cloudy	50	30	86	BLACK_TOP	-10	1.10	1.25	1.40	4.0	4.5	5.0	2.5	2.8	3.1
Cloudy	50	30	86	BLACK_TOP	-5	1.20	1.35	1.50	4.3	4.9	5.4	2.7	3.0	3.4
Cloudy	50	30	86	BLACK_TOP	0	1.30	1.45	1.60	4.7	5.2	5.8	2.9	3.2	3.6
Cloudy	50	30	86	BLACK_TOP	5	0.85	1.00	1.10	3.1	3.6	4.0	1.9	2.2	2.5
Cloudy	50	30	86	BLACK_TOP	10	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	50	30	86	BLACK_TOP	15	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Cloudy	50	30	86	BLACK_TOP	20	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Cloudy	50	30	86	BLACK_TOP	30	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Cloudy	50	30	86	BLACK_TOP	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	30	86	BLACK_TOP	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	50	30	86	DIRT_ROAD	-50	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Cloudy	50	30	86	DIRT_ROAD	-40	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Cloudy	50	30	86	DIRT_ROAD	-30	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Cloudy	50	30	86	DIRT_ROAD	-20	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Cloudy	50	30	86	DIRT_ROAD	-15	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Cloudy	50	30	86	DIRT_ROAD	-10	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Cloudy	50	30	86	DIRT_ROAD	-5	1.15	1.25	1.40	4.1	4.5	5.0	2.6	2.8	3.1
Cloudy	50	30	86	DIRT_ROAD	0	1.25	1.40	1.50	4.5	5.0	5.4	2.8	3.1	3.4
Cloudy	50	30	86	DIRT_ROAD	5	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Cloudy	50	30	86	DIRT_ROAD	10	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Cloudy	50	30	86	DIRT_ROAD	15	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	50	30	86	DIRT_ROAD	20	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	50	30	86	DIRT_ROAD	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	50	30	86	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	30	86	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	50	30	86	LOOSE_SAND	-50	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	50	30	86	LOOSE_SAND	-40	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Cloudy	50	30	86	LOOSE_SAND	-30	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Cloudy	50	30	86	LOOSE_SAND	-20	0.55	0.65	0.70	2.0	2.3	2.5	1.2	1.5	1.6
Cloudy	50	30	86	LOOSE_SAND	-15	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	50	30	86	LOOSE_SAND	-10	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Cloudy	50	30	86	LOOSE_SAND	-5	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Cloudy	50	30	86	LOOSE_SAND	0	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Cloudy	50	30	86	LOOSE_SAND	5	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Cloudy	50	30	86	LOOSE_SAND	10	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	50	30	86	LOOSE_SAND	15	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	50	30	86	LOOSE_SAND	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	30	86	LOOSE_SAND	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	50	30	86	LOOSE_SAND	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Cloudy	50	30	86	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table E-21. Maximum Sustainable Speed, Cloudy, 50% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	50	35	95	BLACK_TOP	-50	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Cloudy	50	35	95	BLACK_TOP	-40	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Cloudy	50	35	95	BLACK_TOP	-30	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Cloudy	50	35	95	BLACK_TOP	-20	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Cloudy	50	35	95	BLACK_TOP	-15	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Cloudy	50	35	95	BLACK_TOP	-10	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Cloudy	50	35	95	BLACK_TOP	-5	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Cloudy	50	35	95	BLACK_TOP	0	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Cloudy	50	35	95	BLACK_TOP	5	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Cloudy	50	35	95	BLACK_TOP	10	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Cloudy	50	35	95	BLACK_TOP	15	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	50	35	95	BLACK_TOP	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	50	35	95	BLACK_TOP	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	50	35	95	BLACK_TOP	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	50	35	95	BLACK_TOP	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Cloudy	50	35	95	DIRT_ROAD	-50	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Cloudy	50	35	95	DIRT_ROAD	-40	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Cloudy	50	35	95	DIRT_ROAD	-30	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Cloudy	50	35	95	DIRT_ROAD	-20	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Cloudy	50	35	95	DIRT_ROAD	-15	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Cloudy	50	35	95	DIRT_ROAD	-10	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Cloudy	50	35	95	DIRT_ROAD	-5	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Cloudy	50	35	95	DIRT_ROAD	0	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Cloudy	50	35	95	DIRT_ROAD	5	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Cloudy	50	35	95	DIRT_ROAD	10	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Cloudy	50	35	95	DIRT_ROAD	15	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Cloudy	50	35	95	DIRT_ROAD	20	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	50	35	95	DIRT_ROAD	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	50	35	95	DIRT_ROAD	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	50	35	95	DIRT_ROAD	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	50	35	95	LOOSE_SAND	-50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	35	95	LOOSE_SAND	-40	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	50	35	95	LOOSE_SAND	-30	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	50	35	95	LOOSE_SAND	-20	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Cloudy	50	35	95	LOOSE_SAND	-15	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Cloudy	50	35	95	LOOSE_SAND	-10	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Cloudy	50	35	95	LOOSE_SAND	-5	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Cloudy	50	35	95	LOOSE_SAND	0	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Cloudy	50	35	95	LOOSE_SAND	5	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	50	35	95	LOOSE_SAND	10	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	50	35	95	LOOSE_SAND	15	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	50	35	95	LOOSE_SAND	20	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	50	35	95	LOOSE_SAND	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	50	35	95	LOOSE_SAND	40	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Cloudy	50	35	95	LOOSE_SAND	50	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1

Table E-22. Maximum Sustainable Speed, Cloudy, 75% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	75	5	41	BLACK_TOP	-50	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	75	5	41	BLACK_TOP	-40	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	75	5	41	BLACK_TOP	-30	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Cloudy	75	5	41	BLACK_TOP	-20	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Cloudy	75	5	41	BLACK_TOP	-15	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Cloudy	75	5	41	BLACK_TOP	-10	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Cloudy	75	5	41	BLACK_TOP	-5	1.75	2.05	2.40	6.3	7.4	8.6	3.9	4.6	5.4
Cloudy	75	5	41	BLACK_TOP	0	1.90	2.15	2.50	6.8	7.7	9.0	4.3	4.8	5.6
Cloudy	75	5	41	BLACK_TOP	5	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	75	5	41	BLACK_TOP	10	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	75	5	41	BLACK_TOP	15	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Cloudy	75	5	41	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Cloudy	75	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	75	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	75	5	41	BLACK_TOP	50	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Cloudy	75	5	41	DIRT_ROAD	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	75	5	41	DIRT_ROAD	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Cloudy	75	5	41	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Cloudy	75	5	41	DIRT_ROAD	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	75	5	41	DIRT_ROAD	-15	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Cloudy	75	5	41	DIRT_ROAD	-10	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Cloudy	75	5	41	DIRT_ROAD	-5	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Cloudy	75	5	41	DIRT_ROAD	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Cloudy	75	5	41	DIRT_ROAD	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Cloudy	75	5	41	DIRT_ROAD	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	75	5	41	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	75	5	41	DIRT_ROAD	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Cloudy	75	5	41	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	75	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	75	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	75	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	75	5	41	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Cloudy	75	5	41	LOOSE_SAND	-30	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	75	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	75	5	41	LOOSE_SAND	-15	1.00	1.15	1.40	3.6	4.1	5.0	2.2	2.6	3.1
Cloudy	75	5	41	LOOSE_SAND	-10	1.10	1.25	1.50	4.0	4.5	5.4	2.5	2.8	3.4
Cloudy	75	5	41	LOOSE_SAND	-5	1.20	1.35	1.60	4.3	4.9	5.8	2.7	3.0	3.6
Cloudy	75	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Cloudy	75	5	41	LOOSE_SAND	5	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Cloudy	75	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	75	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	75	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	75	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	75	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	75	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table E-23. Maximum Sustainable Speed, Cloudy, 75% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	75	10	50	BLACK_TOP	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	75	10	50	BLACK_TOP	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Cloudy	75	10	50	BLACK_TOP	-30	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Cloudy	75	10	50	BLACK_TOP	-20	1.40	1.65	1.95	5.0	5.9	7.0	3.1	3.7	4.4
Cloudy	75	10	50	BLACK_TOP	-15	1.45	1.75	2.05	5.2	6.3	7.4	3.2	3.9	4.6
Cloudy	75	10	50	BLACK_TOP	-10	1.55	1.85	2.15	5.6	6.7	7.7	3.5	4.1	4.8
Cloudy	75	10	50	BLACK_TOP	-5	1.70	1.95	2.25	6.1	7.0	8.1	3.8	4.4	5.0
Cloudy	75	10	50	BLACK_TOP	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Cloudy	75	10	50	BLACK_TOP	5	1.30	1.55	1.85	4.7	5.6	6.7	2.9	3.5	4.1
Cloudy	75	10	50	BLACK_TOP	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	75	10	50	BLACK_TOP	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	75	10	50	BLACK_TOP	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Cloudy	75	10	50	BLACK_TOP	30	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	75	10	50	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	75	10	50	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	75	10	50	DIRT_ROAD	-50	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Cloudy	75	10	50	DIRT_ROAD	-40	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Cloudy	75	10	50	DIRT_ROAD	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Cloudy	75	10	50	DIRT_ROAD	-20	1.30	1.55	1.85	4.7	5.6	6.7	2.9	3.5	4.1
Cloudy	75	10	50	DIRT_ROAD	-15	1.40	1.65	1.95	5.0	5.9	7.0	3.1	3.7	4.4
Cloudy	75	10	50	DIRT_ROAD	-10	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Cloudy	75	10	50	DIRT_ROAD	-5	1.60	1.85	2.15	5.8	6.7	7.7	3.6	4.1	4.8
Cloudy	75	10	50	DIRT_ROAD	0	1.70	1.95	2.25	6.1	7.0	8.1	3.8	4.4	5.0
Cloudy	75	10	50	DIRT_ROAD	5	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Cloudy	75	10	50	DIRT_ROAD	10	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Cloudy	75	10	50	DIRT_ROAD	15	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Cloudy	75	10	50	DIRT_ROAD	20	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	75	10	50	DIRT_ROAD	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	75	10	50	DIRT_ROAD	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	75	10	50	DIRT_ROAD	50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	75	10	50	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	75	10	50	LOOSE_SAND	-40	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Cloudy	75	10	50	LOOSE_SAND	-30	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Cloudy	75	10	50	LOOSE_SAND	-20	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Cloudy	75	10	50	LOOSE_SAND	-15	0.95	1.10	1.30	3.4	4.0	4.7	2.1	2.5	2.9
Cloudy	75	10	50	LOOSE_SAND	-10	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	75	10	50	LOOSE_SAND	-5	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Cloudy	75	10	50	LOOSE_SAND	0	1.25	1.40	1.65	4.5	5.0	5.9	2.8	3.1	3.7
Cloudy	75	10	50	LOOSE_SAND	5	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	75	10	50	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Cloudy	75	10	50	LOOSE_SAND	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	75	10	50	LOOSE_SAND	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	75	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	75	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	75	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table E-24. Maximum Sustainable Speed, Cloudy, 75% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	75	15	59	BLACK_TOP	-50	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Cloudy	75	15	59	BLACK_TOP	-40	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Cloudy	75	15	59	BLACK_TOP	-30	1.10	1.40	1.60	4.0	5.0	5.8	2.5	3.1	3.6
Cloudy	75	15	59	BLACK_TOP	-20	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Cloudy	75	15	59	BLACK_TOP	-15	1.35	1.65	1.85	4.9	5.9	6.7	3.0	3.7	4.1
Cloudy	75	15	59	BLACK_TOP	-10	1.45	1.75	1.95	5.2	6.3	7.0	3.2	3.9	4.4
Cloudy	75	15	59	BLACK_TOP	-5	1.55	1.85	2.05	5.6	6.7	7.4	3.5	4.1	4.6
Cloudy	75	15	59	BLACK_TOP	0	1.70	1.95	2.20	6.1	7.0	7.9	3.8	4.4	4.9
Cloudy	75	15	59	BLACK_TOP	5	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Cloudy	75	15	59	BLACK_TOP	10	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Cloudy	75	15	59	BLACK_TOP	15	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Cloudy	75	15	59	BLACK_TOP	20	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Cloudy	75	15	59	BLACK_TOP	30	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Cloudy	75	15	59	BLACK_TOP	40	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Cloudy	75	15	59	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	75	15	59	DIRT_ROAD	-50	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Cloudy	75	15	59	DIRT_ROAD	-40	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Cloudy	75	15	59	DIRT_ROAD	-30	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Cloudy	75	15	59	DIRT_ROAD	-20	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Cloudy	75	15	59	DIRT_ROAD	-15	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Cloudy	75	15	59	DIRT_ROAD	-10	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Cloudy	75	15	59	DIRT_ROAD	-5	1.50	1.75	1.95	5.4	6.3	7.0	3.4	3.9	4.4
Cloudy	75	15	59	DIRT_ROAD	0	1.60	1.85	2.10	5.8	6.7	7.6	3.6	4.1	4.7
Cloudy	75	15	59	DIRT_ROAD	5	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Cloudy	75	15	59	DIRT_ROAD	10	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Cloudy	75	15	59	DIRT_ROAD	15	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Cloudy	75	15	59	DIRT_ROAD	20	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Cloudy	75	15	59	DIRT_ROAD	30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	75	15	59	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	75	15	59	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	75	15	59	LOOSE_SAND	-50	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Cloudy	75	15	59	LOOSE_SAND	-40	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Cloudy	75	15	59	LOOSE_SAND	-30	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Cloudy	75	15	59	LOOSE_SAND	-20	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Cloudy	75	15	59	LOOSE_SAND	-15	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Cloudy	75	15	59	LOOSE_SAND	-10	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Cloudy	75	15	59	LOOSE_SAND	-5	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Cloudy	75	15	59	LOOSE_SAND	0	1.15	1.35	1.50	4.1	4.9	5.4	2.6	3.0	3.4
Cloudy	75	15	59	LOOSE_SAND	5	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Cloudy	75	15	59	LOOSE_SAND	10	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Cloudy	75	15	59	LOOSE_SAND	15	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	75	15	59	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	75	15	59	LOOSE_SAND	30	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Cloudy	75	15	59	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	75	15	59	LOOSE_SAND	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3

Table E-25. Maximum Sustainable Speed, Cloudy, 75% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	75	20	68	BLACK_TOP	-50	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Cloudy	75	20	68	BLACK_TOP	-40	0.90	1.10	1.25	3.2	4.0	4.5	2.0	2.5	2.8
Cloudy	75	20	68	BLACK_TOP	-30	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	75	20	68	BLACK_TOP	-20	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Cloudy	75	20	68	BLACK_TOP	-15	1.25	1.45	1.65	4.5	5.2	5.9	2.8	3.2	3.7
Cloudy	75	20	68	BLACK_TOP	-10	1.35	1.55	1.75	4.9	5.6	6.3	3.0	3.5	3.9
Cloudy	75	20	68	BLACK_TOP	-5	1.45	1.70	1.85	5.2	6.1	6.7	3.2	3.8	4.1
Cloudy	75	20	68	BLACK_TOP	0	1.55	1.80	1.95	5.6	6.5	7.0	3.5	4.0	4.4
Cloudy	75	20	68	BLACK_TOP	5	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Cloudy	75	20	68	BLACK_TOP	10	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Cloudy	75	20	68	BLACK_TOP	15	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Cloudy	75	20	68	BLACK_TOP	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Cloudy	75	20	68	BLACK_TOP	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	75	20	68	BLACK_TOP	40	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	75	20	68	BLACK_TOP	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	75	20	68	DIRT_ROAD	-50	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Cloudy	75	20	68	DIRT_ROAD	-40	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Cloudy	75	20	68	DIRT_ROAD	-30	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Cloudy	75	20	68	DIRT_ROAD	-20	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Cloudy	75	20	68	DIRT_ROAD	-15	1.20	1.40	1.55	4.3	5.0	5.6	2.7	3.1	3.5
Cloudy	75	20	68	DIRT_ROAD	-10	1.30	1.50	1.65	4.7	5.4	5.9	2.9	3.4	3.7
Cloudy	75	20	68	DIRT_ROAD	-5	1.40	1.60	1.75	5.0	5.8	6.3	3.1	3.6	3.9
Cloudy	75	20	68	DIRT_ROAD	0	1.50	1.70	1.85	5.4	6.1	6.7	3.4	3.8	4.1
Cloudy	75	20	68	DIRT_ROAD	5	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Cloudy	75	20	68	DIRT_ROAD	10	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Cloudy	75	20	68	DIRT_ROAD	15	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Cloudy	75	20	68	DIRT_ROAD	20	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Cloudy	75	20	68	DIRT_ROAD	30	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Cloudy	75	20	68	DIRT_ROAD	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	75	20	68	DIRT_ROAD	50	0.15	0.25	0.25	0.5	0.9	0.9	0.3	0.6	0.6
Cloudy	75	20	68	LOOSE_SAND	-50	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Cloudy	75	20	68	LOOSE_SAND	-40	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Cloudy	75	20	68	LOOSE_SAND	-30	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	75	20	68	LOOSE_SAND	-20	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Cloudy	75	20	68	LOOSE_SAND	-15	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Cloudy	75	20	68	LOOSE_SAND	-10	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Cloudy	75	20	68	LOOSE_SAND	-5	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Cloudy	75	20	68	LOOSE_SAND	0	1.10	1.25	1.35	4.0	4.5	4.9	2.5	2.8	3.0
Cloudy	75	20	68	LOOSE_SAND	5	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Cloudy	75	20	68	LOOSE_SAND	10	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Cloudy	75	20	68	LOOSE_SAND	15	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Cloudy	75	20	68	LOOSE_SAND	20	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	75	20	68	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	75	20	68	LOOSE_SAND	40	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Cloudy	75	20	68	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table E-26. Maximum Sustainable Speed, Cloudy, 75% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	75	25	77	BLACK_TOP	-50	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Cloudy	75	25	77	BLACK_TOP	-40	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Cloudy	75	25	77	BLACK_TOP	-30	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Cloudy	75	25	77	BLACK_TOP	-20	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Cloudy	75	25	77	BLACK_TOP	-15	1.10	1.25	1.35	4.0	4.5	4.9	2.5	2.8	3.0
Cloudy	75	25	77	BLACK_TOP	-10	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Cloudy	75	25	77	BLACK_TOP	-5	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Cloudy	75	25	77	BLACK_TOP	0	1.45	1.55	1.70	5.2	5.6	6.1	3.2	3.5	3.8
Cloudy	75	25	77	BLACK_TOP	5	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Cloudy	75	25	77	BLACK_TOP	10	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Cloudy	75	25	77	BLACK_TOP	15	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Cloudy	75	25	77	BLACK_TOP	20	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	75	25	77	BLACK_TOP	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Cloudy	75	25	77	BLACK_TOP	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	75	25	77	BLACK_TOP	50	0.15	0.20	0.20	0.5	0.7	0.7	0.3	0.4	0.4
Cloudy	75	25	77	DIRT_ROAD	-50	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	75	25	77	DIRT_ROAD	-40	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Cloudy	75	25	77	DIRT_ROAD	-30	0.85	0.90	1.05	3.1	3.2	3.8	1.9	2.0	2.4
Cloudy	75	25	77	DIRT_ROAD	-20	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Cloudy	75	25	77	DIRT_ROAD	-15	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Cloudy	75	25	77	DIRT_ROAD	-10	1.15	1.25	1.40	4.1	4.5	5.0	2.6	2.8	3.1
Cloudy	75	25	77	DIRT_ROAD	-5	1.25	1.35	1.50	4.5	4.9	5.4	2.8	3.0	3.4
Cloudy	75	25	77	DIRT_ROAD	0	1.35	1.45	1.60	4.9	5.2	5.8	3.0	3.2	3.6
Cloudy	75	25	77	DIRT_ROAD	5	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Cloudy	75	25	77	DIRT_ROAD	10	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	75	25	77	DIRT_ROAD	15	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Cloudy	75	25	77	DIRT_ROAD	20	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Cloudy	75	25	77	DIRT_ROAD	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Cloudy	75	25	77	DIRT_ROAD	40	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Cloudy	75	25	77	DIRT_ROAD	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	75	25	77	LOOSE_SAND	-50	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Cloudy	75	25	77	LOOSE_SAND	-40	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	75	25	77	LOOSE_SAND	-30	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Cloudy	75	25	77	LOOSE_SAND	-20	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	75	25	77	LOOSE_SAND	-15	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Cloudy	75	25	77	LOOSE_SAND	-10	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Cloudy	75	25	77	LOOSE_SAND	-5	0.85	0.95	1.05	3.1	3.4	3.8	1.9	2.1	2.4
Cloudy	75	25	77	LOOSE_SAND	0	1.00	1.05	1.15	3.6	3.8	4.1	2.2	2.4	2.6
Cloudy	75	25	77	LOOSE_SAND	5	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Cloudy	75	25	77	LOOSE_SAND	10	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Cloudy	75	25	77	LOOSE_SAND	15	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Cloudy	75	25	77	LOOSE_SAND	20	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Cloudy	75	25	77	LOOSE_SAND	30	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Cloudy	75	25	77	LOOSE_SAND	40	0.10	0.10	0.10	0.4	0.4	0.4	0.2	0.2	0.2
Cloudy	75	25	77	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table E-27. Maximum Sustainable Speed, Cloudy, 75% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	75	30	86	BLACK_TOP	-50	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Cloudy	75	30	86	BLACK_TOP	-40	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Cloudy	75	30	86	BLACK_TOP	-30	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Cloudy	75	30	86	BLACK_TOP	-20	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Cloudy	75	30	86	BLACK_TOP	-15	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Cloudy	75	30	86	BLACK_TOP	-10	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Cloudy	75	30	86	BLACK_TOP	-5	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Cloudy	75	30	86	BLACK_TOP	0	1.10	1.15	1.35	4.0	4.1	4.9	2.5	2.6	3.0
Cloudy	75	30	86	BLACK_TOP	5	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Cloudy	75	30	86	BLACK_TOP	10	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Cloudy	75	30	86	BLACK_TOP	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	75	30	86	BLACK_TOP	20	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	75	30	86	BLACK_TOP	30	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Cloudy	75	30	86	BLACK_TOP	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	75	30	86	BLACK_TOP	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	75	30	86	DIRT_ROAD	-50	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	75	30	86	DIRT_ROAD	-40	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Cloudy	75	30	86	DIRT_ROAD	-30	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Cloudy	75	30	86	DIRT_ROAD	-20	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Cloudy	75	30	86	DIRT_ROAD	-15	0.75	0.80	0.95	2.7	2.9	3.4	1.7	1.8	2.1
Cloudy	75	30	86	DIRT_ROAD	-10	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Cloudy	75	30	86	DIRT_ROAD	-5	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Cloudy	75	30	86	DIRT_ROAD	0	1.05	1.10	1.25	3.8	4.0	4.5	2.4	2.5	2.8
Cloudy	75	30	86	DIRT_ROAD	5	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Cloudy	75	30	86	DIRT_ROAD	10	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	75	30	86	DIRT_ROAD	15	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	75	30	86	DIRT_ROAD	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	75	30	86	DIRT_ROAD	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	75	30	86	DIRT_ROAD	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	75	30	86	DIRT_ROAD	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Cloudy	75	30	86	LOOSE_SAND	-50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	75	30	86	LOOSE_SAND	-40	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Cloudy	75	30	86	LOOSE_SAND	-30	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	75	30	86	LOOSE_SAND	-20	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	75	30	86	LOOSE_SAND	-15	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Cloudy	75	30	86	LOOSE_SAND	-10	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Cloudy	75	30	86	LOOSE_SAND	-5	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Cloudy	75	30	86	LOOSE_SAND	0	0.75	0.80	0.90	2.7	2.9	3.2	1.7	1.8	2.0
Cloudy	75	30	86	LOOSE_SAND	5	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Cloudy	75	30	86	LOOSE_SAND	10	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	75	30	86	LOOSE_SAND	15	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	75	30	86	LOOSE_SAND	20	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	75	30	86	LOOSE_SAND	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	75	30	86	LOOSE_SAND	40	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Cloudy	75	30	86	LOOSE_SAND	50	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1

Table E-28. Maximum Sustainable Speed, Cloudy, 75% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	75	35	95	BLACK_TOP	-50	0.05	0.10	0.25	0.2	0.4	0.9	0.1	0.2	0.6
Cloudy	75	35	95	BLACK_TOP	-40	0.10	0.15	0.30	0.4	0.5	1.1	0.2	0.3	0.7
Cloudy	75	35	95	BLACK_TOP	-30	0.10	0.20	0.35	0.4	0.7	1.3	0.2	0.4	0.8
Cloudy	75	35	95	BLACK_TOP	-20	0.20	0.25	0.45	0.7	0.9	1.6	0.4	0.6	1.0
Cloudy	75	35	95	BLACK_TOP	-15	0.20	0.30	0.50	0.7	1.1	1.8	0.4	0.7	1.1
Cloudy	75	35	95	BLACK_TOP	-10	0.25	0.35	0.60	0.9	1.3	2.2	0.6	0.8	1.3
Cloudy	75	35	95	BLACK_TOP	-5	0.35	0.45	0.70	1.3	1.6	2.5	0.8	1.0	1.6
Cloudy	75	35	95	BLACK_TOP	0	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Cloudy	75	35	95	BLACK_TOP	5	0.15	0.20	0.40	0.5	0.7	1.4	0.3	0.4	0.9
Cloudy	75	35	95	BLACK_TOP	10	0.05	0.10	0.25	0.2	0.4	0.9	0.1	0.2	0.6
Cloudy	75	35	95	BLACK_TOP	15	0.05	0.05	0.15	0.2	0.2	0.5	0.1	0.1	0.3
Cloudy	75	35	95	BLACK_TOP	20	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Cloudy	75	35	95	BLACK_TOP	30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	BLACK_TOP	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	BLACK_TOP	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	DIRT_ROAD	-50	0.05	0.10	0.20	0.2	0.4	0.7	0.1	0.2	0.4
Cloudy	75	35	95	DIRT_ROAD	-40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Cloudy	75	35	95	DIRT_ROAD	-30	0.10	0.15	0.30	0.4	0.5	1.1	0.2	0.3	0.7
Cloudy	75	35	95	DIRT_ROAD	-20	0.15	0.25	0.40	0.5	0.9	1.4	0.3	0.6	0.9
Cloudy	75	35	95	DIRT_ROAD	-15	0.20	0.30	0.50	0.7	1.1	1.8	0.4	0.7	1.1
Cloudy	75	35	95	DIRT_ROAD	-10	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Cloudy	75	35	95	DIRT_ROAD	-5	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	75	35	95	DIRT_ROAD	0	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Cloudy	75	35	95	DIRT_ROAD	5	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Cloudy	75	35	95	DIRT_ROAD	10	0.05	0.10	0.20	0.2	0.4	0.7	0.1	0.2	0.4
Cloudy	75	35	95	DIRT_ROAD	15	0.05	0.05	0.15	0.2	0.2	0.5	0.1	0.1	0.3
Cloudy	75	35	95	DIRT_ROAD	20	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Cloudy	75	35	95	DIRT_ROAD	30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	DIRT_ROAD	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	DIRT_ROAD	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	LOOSE_SAND	-50	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Cloudy	75	35	95	LOOSE_SAND	-40	0.05	0.05	0.15	0.2	0.2	0.5	0.1	0.1	0.3
Cloudy	75	35	95	LOOSE_SAND	-30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Cloudy	75	35	95	LOOSE_SAND	-20	0.10	0.10	0.25	0.4	0.4	0.9	0.2	0.2	0.6
Cloudy	75	35	95	LOOSE_SAND	-15	0.10	0.15	0.30	0.4	0.5	1.1	0.2	0.3	0.7
Cloudy	75	35	95	LOOSE_SAND	-10	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Cloudy	75	35	95	LOOSE_SAND	-5	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Cloudy	75	35	95	LOOSE_SAND	0	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	75	35	95	LOOSE_SAND	5	0.05	0.10	0.20	0.2	0.4	0.7	0.1	0.2	0.4
Cloudy	75	35	95	LOOSE_SAND	10	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Cloudy	75	35	95	LOOSE_SAND	15	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	LOOSE_SAND	20	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	75	35	95	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	75	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	75	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table E-29. Maximum Sustainable Speed, Cloudy, 95% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	95	5	41	BLACK_TOP	-50	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	95	5	41	BLACK_TOP	-40	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Cloudy	95	5	41	BLACK_TOP	-30	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Cloudy	95	5	41	BLACK_TOP	-20	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Cloudy	95	5	41	BLACK_TOP	-15	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Cloudy	95	5	41	BLACK_TOP	-10	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Cloudy	95	5	41	BLACK_TOP	-5	1.75	2.05	2.40	6.3	7.4	8.6	3.9	4.6	5.4
Cloudy	95	5	41	BLACK_TOP	0	1.85	2.15	2.50	6.7	7.7	9.0	4.1	4.8	5.6
Cloudy	95	5	41	BLACK_TOP	5	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	95	5	41	BLACK_TOP	10	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	95	5	41	BLACK_TOP	15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Cloudy	95	5	41	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Cloudy	95	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Cloudy	95	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Cloudy	95	5	41	BLACK_TOP	50	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Cloudy	95	5	41	DIRT_ROAD	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	95	5	41	DIRT_ROAD	-40	1.10	1.30	1.65	4.0	4.7	5.9	2.5	2.9	3.7
Cloudy	95	5	41	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Cloudy	95	5	41	DIRT_ROAD	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Cloudy	95	5	41	DIRT_ROAD	-15	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Cloudy	95	5	41	DIRT_ROAD	-10	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Cloudy	95	5	41	DIRT_ROAD	-5	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Cloudy	95	5	41	DIRT_ROAD	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Cloudy	95	5	41	DIRT_ROAD	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Cloudy	95	5	41	DIRT_ROAD	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Cloudy	95	5	41	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Cloudy	95	5	41	DIRT_ROAD	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Cloudy	95	5	41	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Cloudy	95	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	95	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	95	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	95	5	41	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Cloudy	95	5	41	LOOSE_SAND	-30	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	95	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	95	5	41	LOOSE_SAND	-15	1.00	1.15	1.40	3.6	4.1	5.0	2.2	2.6	3.1
Cloudy	95	5	41	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Cloudy	95	5	41	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Cloudy	95	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Cloudy	95	5	41	LOOSE_SAND	5	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Cloudy	95	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	95	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	95	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	95	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	95	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	95	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table E-30. Maximum Sustainable Speed, Cloudy, 95% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	95	10	50	BLACK_TOP	-50	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Cloudy	95	10	50	BLACK_TOP	-40	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Cloudy	95	10	50	BLACK_TOP	-30	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Cloudy	95	10	50	BLACK_TOP	-20	1.35	1.65	1.90	4.9	5.9	6.8	3.0	3.7	4.3
Cloudy	95	10	50	BLACK_TOP	-15	1.45	1.75	2.00	5.2	6.3	7.2	3.2	3.9	4.5
Cloudy	95	10	50	BLACK_TOP	-10	1.55	1.85	2.10	5.6	6.7	7.6	3.5	4.1	4.7
Cloudy	95	10	50	BLACK_TOP	-5	1.65	1.95	2.20	5.9	7.0	7.9	3.7	4.4	4.9
Cloudy	95	10	50	BLACK_TOP	0	1.80	2.05	2.35	6.5	7.4	8.5	4.0	4.6	5.3
Cloudy	95	10	50	BLACK_TOP	5	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Cloudy	95	10	50	BLACK_TOP	10	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Cloudy	95	10	50	BLACK_TOP	15	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Cloudy	95	10	50	BLACK_TOP	20	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Cloudy	95	10	50	BLACK_TOP	30	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Cloudy	95	10	50	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Cloudy	95	10	50	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	95	10	50	DIRT_ROAD	-50	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	95	10	50	DIRT_ROAD	-40	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Cloudy	95	10	50	DIRT_ROAD	-30	1.15	1.35	1.65	4.1	4.9	5.9	2.6	3.0	3.7
Cloudy	95	10	50	DIRT_ROAD	-20	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Cloudy	95	10	50	DIRT_ROAD	-15	1.40	1.65	1.90	5.0	5.9	6.8	3.1	3.7	4.3
Cloudy	95	10	50	DIRT_ROAD	-10	1.50	1.75	2.00	5.4	6.3	7.2	3.4	3.9	4.5
Cloudy	95	10	50	DIRT_ROAD	-5	1.60	1.85	2.10	5.8	6.7	7.6	3.6	4.1	4.7
Cloudy	95	10	50	DIRT_ROAD	0	1.70	1.95	2.20	6.1	7.0	7.9	3.8	4.4	4.9
Cloudy	95	10	50	DIRT_ROAD	5	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Cloudy	95	10	50	DIRT_ROAD	10	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Cloudy	95	10	50	DIRT_ROAD	15	0.70	0.85	1.05	2.5	3.1	3.8	1.6	1.9	2.4
Cloudy	95	10	50	DIRT_ROAD	20	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Cloudy	95	10	50	DIRT_ROAD	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	95	10	50	DIRT_ROAD	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	95	10	50	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Cloudy	95	10	50	LOOSE_SAND	-50	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Cloudy	95	10	50	LOOSE_SAND	-40	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Cloudy	95	10	50	LOOSE_SAND	-30	0.70	0.85	1.05	2.5	3.1	3.8	1.6	1.9	2.4
Cloudy	95	10	50	LOOSE_SAND	-20	0.85	1.00	1.20	3.1	3.6	4.3	1.9	2.2	2.7
Cloudy	95	10	50	LOOSE_SAND	-15	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Cloudy	95	10	50	LOOSE_SAND	-10	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	95	10	50	LOOSE_SAND	-5	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Cloudy	95	10	50	LOOSE_SAND	0	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Cloudy	95	10	50	LOOSE_SAND	5	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Cloudy	95	10	50	LOOSE_SAND	10	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Cloudy	95	10	50	LOOSE_SAND	15	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Cloudy	95	10	50	LOOSE_SAND	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Cloudy	95	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	95	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	95	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table E-31. Maximum Sustainable Speed, Cloudy, 95% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	95	15	59	BLACK_TOP	-50	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Cloudy	95	15	59	BLACK_TOP	-40	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Cloudy	95	15	59	BLACK_TOP	-30	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Cloudy	95	15	59	BLACK_TOP	-20	1.25	1.55	1.70	4.5	5.6	6.1	2.8	3.5	3.8
Cloudy	95	15	59	BLACK_TOP	-15	1.35	1.60	1.80	4.9	5.8	6.5	3.0	3.6	4.0
Cloudy	95	15	59	BLACK_TOP	-10	1.45	1.70	1.90	5.2	6.1	6.8	3.2	3.8	4.3
Cloudy	95	15	59	BLACK_TOP	-5	1.55	1.85	2.00	5.6	6.7	7.2	3.5	4.1	4.5
Cloudy	95	15	59	BLACK_TOP	0	1.65	1.95	2.10	5.9	7.0	7.6	3.7	4.4	4.7
Cloudy	95	15	59	BLACK_TOP	5	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Cloudy	95	15	59	BLACK_TOP	10	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Cloudy	95	15	59	BLACK_TOP	15	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Cloudy	95	15	59	BLACK_TOP	20	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Cloudy	95	15	59	BLACK_TOP	30	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Cloudy	95	15	59	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Cloudy	95	15	59	BLACK_TOP	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Cloudy	95	15	59	DIRT_ROAD	-50	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Cloudy	95	15	59	DIRT_ROAD	-40	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Cloudy	95	15	59	DIRT_ROAD	-30	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Cloudy	95	15	59	DIRT_ROAD	-20	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Cloudy	95	15	59	DIRT_ROAD	-15	1.30	1.55	1.70	4.7	5.6	6.1	2.9	3.5	3.8
Cloudy	95	15	59	DIRT_ROAD	-10	1.35	1.65	1.80	4.9	5.9	6.5	3.0	3.7	4.0
Cloudy	95	15	59	DIRT_ROAD	-5	1.50	1.75	1.90	5.4	6.3	6.8	3.4	3.9	4.3
Cloudy	95	15	59	DIRT_ROAD	0	1.60	1.85	2.00	5.8	6.7	7.2	3.6	4.1	4.5
Cloudy	95	15	59	DIRT_ROAD	5	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Cloudy	95	15	59	DIRT_ROAD	10	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Cloudy	95	15	59	DIRT_ROAD	15	0.60	0.80	0.90	2.2	2.9	3.2	1.3	1.8	2.0
Cloudy	95	15	59	DIRT_ROAD	20	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Cloudy	95	15	59	DIRT_ROAD	30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Cloudy	95	15	59	DIRT_ROAD	40	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Cloudy	95	15	59	DIRT_ROAD	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	95	15	59	LOOSE_SAND	-50	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Cloudy	95	15	59	LOOSE_SAND	-40	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Cloudy	95	15	59	LOOSE_SAND	-30	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Cloudy	95	15	59	LOOSE_SAND	-20	0.75	0.95	1.05	2.7	3.4	3.8	1.7	2.1	2.4
Cloudy	95	15	59	LOOSE_SAND	-15	0.85	1.05	1.15	3.1	3.8	4.1	1.9	2.4	2.6
Cloudy	95	15	59	LOOSE_SAND	-10	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Cloudy	95	15	59	LOOSE_SAND	-5	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Cloudy	95	15	59	LOOSE_SAND	0	1.15	1.35	1.45	4.1	4.9	5.2	2.6	3.0	3.2
Cloudy	95	15	59	LOOSE_SAND	5	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Cloudy	95	15	59	LOOSE_SAND	10	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Cloudy	95	15	59	LOOSE_SAND	15	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Cloudy	95	15	59	LOOSE_SAND	20	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Cloudy	95	15	59	LOOSE_SAND	30	0.15	0.25	0.25	0.5	0.9	0.9	0.3	0.6	0.6
Cloudy	95	15	59	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	95	15	59	LOOSE_SAND	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3

Table E-32. Maximum Sustainable Speed, Cloudy, 95% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	95	20	68	BLACK_TOP	-50	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Cloudy	95	20	68	BLACK_TOP	-40	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Cloudy	95	20	68	BLACK_TOP	-30	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Cloudy	95	20	68	BLACK_TOP	-20	1.15	1.30	1.45	4.1	4.7	5.2	2.6	2.9	3.2
Cloudy	95	20	68	BLACK_TOP	-15	1.25	1.40	1.55	4.5	5.0	5.6	2.8	3.1	3.5
Cloudy	95	20	68	BLACK_TOP	-10	1.35	1.50	1.65	4.9	5.4	5.9	3.0	3.4	3.7
Cloudy	95	20	68	BLACK_TOP	-5	1.45	1.60	1.75	5.2	5.8	6.3	3.2	3.6	3.9
Cloudy	95	20	68	BLACK_TOP	0	1.55	1.70	1.85	5.6	6.1	6.7	3.5	3.8	4.1
Cloudy	95	20	68	BLACK_TOP	5	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Cloudy	95	20	68	BLACK_TOP	10	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Cloudy	95	20	68	BLACK_TOP	15	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Cloudy	95	20	68	BLACK_TOP	20	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Cloudy	95	20	68	BLACK_TOP	30	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Cloudy	95	20	68	BLACK_TOP	40	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Cloudy	95	20	68	BLACK_TOP	50	0.20	0.25	0.25	0.7	0.9	0.9	0.4	0.6	0.6
Cloudy	95	20	68	DIRT_ROAD	-50	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Cloudy	95	20	68	DIRT_ROAD	-40	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Cloudy	95	20	68	DIRT_ROAD	-30	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Cloudy	95	20	68	DIRT_ROAD	-20	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Cloudy	95	20	68	DIRT_ROAD	-15	1.15	1.30	1.45	4.1	4.7	5.2	2.6	2.9	3.2
Cloudy	95	20	68	DIRT_ROAD	-10	1.25	1.40	1.55	4.5	5.0	5.6	2.8	3.1	3.5
Cloudy	95	20	68	DIRT_ROAD	-5	1.35	1.50	1.65	4.9	5.4	5.9	3.0	3.4	3.7
Cloudy	95	20	68	DIRT_ROAD	0	1.50	1.60	1.75	5.4	5.8	6.3	3.4	3.6	3.9
Cloudy	95	20	68	DIRT_ROAD	5	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Cloudy	95	20	68	DIRT_ROAD	10	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Cloudy	95	20	68	DIRT_ROAD	15	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Cloudy	95	20	68	DIRT_ROAD	20	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Cloudy	95	20	68	DIRT_ROAD	30	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Cloudy	95	20	68	DIRT_ROAD	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	95	20	68	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	95	20	68	LOOSE_SAND	-50	0.40	0.50	0.55	1.4	1.8	2.0	0.9	1.1	1.2
Cloudy	95	20	68	LOOSE_SAND	-40	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Cloudy	95	20	68	LOOSE_SAND	-30	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Cloudy	95	20	68	LOOSE_SAND	-20	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Cloudy	95	20	68	LOOSE_SAND	-15	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Cloudy	95	20	68	LOOSE_SAND	-10	0.85	0.95	1.05	3.1	3.4	3.8	1.9	2.1	2.4
Cloudy	95	20	68	LOOSE_SAND	-5	0.95	1.05	1.15	3.4	3.8	4.1	2.1	2.4	2.6
Cloudy	95	20	68	LOOSE_SAND	0	1.05	1.15	1.25	3.8	4.1	4.5	2.4	2.6	2.8
Cloudy	95	20	68	LOOSE_SAND	5	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Cloudy	95	20	68	LOOSE_SAND	10	0.40	0.50	0.55	1.4	1.8	2.0	0.9	1.1	1.2
Cloudy	95	20	68	LOOSE_SAND	15	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Cloudy	95	20	68	LOOSE_SAND	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	95	20	68	LOOSE_SAND	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	95	20	68	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	95	20	68	LOOSE_SAND	50	0.10	0.10	0.10	0.4	0.4	0.4	0.2	0.2	0.2

Table E-33. Maximum Sustainable Speed, Cloudy, 95% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	95	25	77	BLACK_TOP	-50	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Cloudy	95	25	77	BLACK_TOP	-40	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Cloudy	95	25	77	BLACK_TOP	-30	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Cloudy	95	25	77	BLACK_TOP	-20	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Cloudy	95	25	77	BLACK_TOP	-15	1.00	1.05	1.20	3.6	3.8	4.3	2.2	2.4	2.7
Cloudy	95	25	77	BLACK_TOP	-10	1.10	1.15	1.30	4.0	4.1	4.7	2.5	2.6	2.9
Cloudy	95	25	77	BLACK_TOP	-5	1.20	1.25	1.40	4.3	4.5	5.0	2.7	2.8	3.1
Cloudy	95	25	77	BLACK_TOP	0	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Cloudy	95	25	77	BLACK_TOP	5	0.85	0.90	1.05	3.1	3.2	3.8	1.9	2.0	2.4
Cloudy	95	25	77	BLACK_TOP	10	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Cloudy	95	25	77	BLACK_TOP	15	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	95	25	77	BLACK_TOP	20	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	95	25	77	BLACK_TOP	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Cloudy	95	25	77	BLACK_TOP	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	95	25	77	BLACK_TOP	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	95	25	77	DIRT_ROAD	-50	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Cloudy	95	25	77	DIRT_ROAD	-40	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Cloudy	95	25	77	DIRT_ROAD	-30	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Cloudy	95	25	77	DIRT_ROAD	-20	0.85	0.90	1.05	3.1	3.2	3.8	1.9	2.0	2.4
Cloudy	95	25	77	DIRT_ROAD	-15	0.95	1.00	1.15	3.4	3.6	4.1	2.1	2.2	2.6
Cloudy	95	25	77	DIRT_ROAD	-10	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Cloudy	95	25	77	DIRT_ROAD	-5	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Cloudy	95	25	77	DIRT_ROAD	0	1.25	1.30	1.45	4.5	4.7	5.2	2.8	2.9	3.2
Cloudy	95	25	77	DIRT_ROAD	5	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Cloudy	95	25	77	DIRT_ROAD	10	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Cloudy	95	25	77	DIRT_ROAD	15	0.40	0.45	0.50	1.4	1.6	1.8	0.9	1.0	1.1
Cloudy	95	25	77	DIRT_ROAD	20	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Cloudy	95	25	77	DIRT_ROAD	30	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Cloudy	95	25	77	DIRT_ROAD	40	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	95	25	77	DIRT_ROAD	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Cloudy	95	25	77	LOOSE_SAND	-50	0.30	0.30	0.40	1.1	1.1	1.4	0.7	0.7	0.9
Cloudy	95	25	77	LOOSE_SAND	-40	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Cloudy	95	25	77	LOOSE_SAND	-30	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Cloudy	95	25	77	LOOSE_SAND	-20	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Cloudy	95	25	77	LOOSE_SAND	-15	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Cloudy	95	25	77	LOOSE_SAND	-10	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Cloudy	95	25	77	LOOSE_SAND	-5	0.80	0.85	0.95	2.9	3.1	3.4	1.8	1.9	2.1
Cloudy	95	25	77	LOOSE_SAND	0	0.90	0.95	1.05	3.2	3.4	3.8	2.0	2.1	2.4
Cloudy	95	25	77	LOOSE_SAND	5	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Cloudy	95	25	77	LOOSE_SAND	10	0.30	0.30	0.40	1.1	1.1	1.4	0.7	0.7	0.9
Cloudy	95	25	77	LOOSE_SAND	15	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Cloudy	95	25	77	LOOSE_SAND	20	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Cloudy	95	25	77	LOOSE_SAND	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Cloudy	95	25	77	LOOSE_SAND	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	95	25	77	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table E-34. Maximum Sustainable Speed, Cloudy, 95% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	95	30	86	BLACK_TOP	-50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	95	30	86	BLACK_TOP	-40	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Cloudy	95	30	86	BLACK_TOP	-30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Cloudy	95	30	86	BLACK_TOP	-20	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Cloudy	95	30	86	BLACK_TOP	-15	0.55	0.60	0.80	2.0	2.2	2.9	1.2	1.3	1.8
Cloudy	95	30	86	BLACK_TOP	-10	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Cloudy	95	30	86	BLACK_TOP	-5	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Cloudy	95	30	86	BLACK_TOP	0	0.80	0.90	1.10	2.9	3.2	4.0	1.8	2.0	2.5
Cloudy	95	30	86	BLACK_TOP	5	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Cloudy	95	30	86	BLACK_TOP	10	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	95	30	86	BLACK_TOP	15	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Cloudy	95	30	86	BLACK_TOP	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	95	30	86	BLACK_TOP	30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Cloudy	95	30	86	BLACK_TOP	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	95	30	86	BLACK_TOP	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	95	30	86	DIRT_ROAD	-50	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Cloudy	95	30	86	DIRT_ROAD	-40	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Cloudy	95	30	86	DIRT_ROAD	-30	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Cloudy	95	30	86	DIRT_ROAD	-20	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Cloudy	95	30	86	DIRT_ROAD	-15	0.50	0.55	0.75	1.8	2.0	2.7	1.1	1.2	1.7
Cloudy	95	30	86	DIRT_ROAD	-10	0.55	0.65	0.80	2.0	2.3	2.9	1.2	1.5	1.8
Cloudy	95	30	86	DIRT_ROAD	-5	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Cloudy	95	30	86	DIRT_ROAD	0	0.75	0.85	1.05	2.7	3.1	3.8	1.7	1.9	2.4
Cloudy	95	30	86	DIRT_ROAD	5	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Cloudy	95	30	86	DIRT_ROAD	10	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Cloudy	95	30	86	DIRT_ROAD	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Cloudy	95	30	86	DIRT_ROAD	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	95	30	86	DIRT_ROAD	30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Cloudy	95	30	86	DIRT_ROAD	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	95	30	86	DIRT_ROAD	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Cloudy	95	30	86	LOOSE_SAND	-50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	95	30	86	LOOSE_SAND	-40	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Cloudy	95	30	86	LOOSE_SAND	-30	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Cloudy	95	30	86	LOOSE_SAND	-20	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Cloudy	95	30	86	LOOSE_SAND	-15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Cloudy	95	30	86	LOOSE_SAND	-10	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Cloudy	95	30	86	LOOSE_SAND	-5	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Cloudy	95	30	86	LOOSE_SAND	0	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Cloudy	95	30	86	LOOSE_SAND	5	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Cloudy	95	30	86	LOOSE_SAND	10	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Cloudy	95	30	86	LOOSE_SAND	15	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Cloudy	95	30	86	LOOSE_SAND	20	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Cloudy	95	30	86	LOOSE_SAND	30	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Cloudy	95	30	86	LOOSE_SAND	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Cloudy	95	30	86	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table E-35. Maximum Sustainable Speed, Cloudy, 95% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Cloudy	95	35	95	BLACK_TOP	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	BLACK_TOP	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	DIRT_ROAD	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Cloudy	95	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Appendix F

Maximum Sustainable Speed Tables, Night

Table F-1. Maximum Sustainable Speed, Night, 5% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	5	5	41	BLACK_TOP	-50	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Night	5	5	41	BLACK_TOP	-40	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Night	5	5	41	BLACK_TOP	-30	1.35	1.65	1.90	4.9	5.9	6.8	3.0	3.7	4.3
Night	5	5	41	BLACK_TOP	-20	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	5	5	41	BLACK_TOP	-15	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	5	5	41	BLACK_TOP	-10	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	5	5	41	BLACK_TOP	-5	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	5	5	41	BLACK_TOP	0	1.90	2.25	2.50	6.8	8.1	9.0	4.3	5.0	5.6
Night	5	5	41	BLACK_TOP	5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	5	5	41	BLACK_TOP	10	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Night	5	5	41	BLACK_TOP	15	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Night	5	5	41	BLACK_TOP	20	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Night	5	5	41	BLACK_TOP	30	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Night	5	5	41	BLACK_TOP	40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	5	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	5	5	41	DIRT_ROAD	-50	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	5	5	41	DIRT_ROAD	-40	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Night	5	5	41	DIRT_ROAD	-30	1.25	1.55	1.80	4.5	5.6	6.5	2.8	3.5	4.0
Night	5	5	41	DIRT_ROAD	-20	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	5	5	41	DIRT_ROAD	-15	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	5	5	41	DIRT_ROAD	-10	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	5	5	41	DIRT_ROAD	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	5	5	41	DIRT_ROAD	0	1.85	2.15	2.40	6.7	7.7	8.6	4.1	4.8	5.4
Night	5	5	41	DIRT_ROAD	5	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Night	5	5	41	DIRT_ROAD	10	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	5	5	41	DIRT_ROAD	15	0.75	1.00	1.20	2.7	3.6	4.3	1.7	2.2	2.7
Night	5	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Night	5	5	41	DIRT_ROAD	30	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Night	5	5	41	DIRT_ROAD	40	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	5	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	5	5	41	LOOSE_SAND	-50	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	5	5	41	LOOSE_SAND	-40	0.70	0.85	1.05	2.5	3.1	3.8	1.6	1.9	2.4
Night	5	5	41	LOOSE_SAND	-30	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Night	5	5	41	LOOSE_SAND	-20	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Night	5	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Night	5	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Night	5	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Night	5	5	41	LOOSE_SAND	0	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Night	5	5	41	LOOSE_SAND	5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	5	5	41	LOOSE_SAND	10	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	5	5	41	LOOSE_SAND	15	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Night	5	5	41	LOOSE_SAND	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	5	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	5	5	41	LOOSE_SAND	40	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Night	5	5	41	LOOSE_SAND	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6

Table F-2. Maximum Sustainable Speed, Night, 5% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	5	10	50	BLACK_TOP	-50	1.05	1.25	1.60	3.8	4.5	5.8	2.4	2.8	3.6
Night	5	10	50	BLACK_TOP	-40	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Night	5	10	50	BLACK_TOP	-30	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	5	10	50	BLACK_TOP	-20	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Night	5	10	50	BLACK_TOP	-15	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Night	5	10	50	BLACK_TOP	-10	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Night	5	10	50	BLACK_TOP	-5	1.75	2.05	2.40	6.3	7.4	8.6	3.9	4.6	5.4
Night	5	10	50	BLACK_TOP	0	1.85	2.15	2.50	6.7	7.7	9.0	4.1	4.8	5.6
Night	5	10	50	BLACK_TOP	5	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Night	5	10	50	BLACK_TOP	10	1.05	1.25	1.60	3.8	4.5	5.8	2.4	2.8	3.6
Night	5	10	50	BLACK_TOP	15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Night	5	10	50	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Night	5	10	50	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	5	10	50	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Night	5	10	50	BLACK_TOP	50	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Night	5	10	50	DIRT_ROAD	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	5	10	50	DIRT_ROAD	-40	1.10	1.30	1.65	4.0	4.7	5.9	2.5	2.9	3.7
Night	5	10	50	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Night	5	10	50	DIRT_ROAD	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Night	5	10	50	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Night	5	10	50	DIRT_ROAD	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Night	5	10	50	DIRT_ROAD	-5	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Night	5	10	50	DIRT_ROAD	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Night	5	10	50	DIRT_ROAD	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	5	10	50	DIRT_ROAD	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	5	10	50	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Night	5	10	50	DIRT_ROAD	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Night	5	10	50	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	5	10	50	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	5	10	50	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	5	10	50	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	5	10	50	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Night	5	10	50	LOOSE_SAND	-30	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Night	5	10	50	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Night	5	10	50	LOOSE_SAND	-15	1.00	1.15	1.40	3.6	4.1	5.0	2.2	2.6	3.1
Night	5	10	50	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Night	5	10	50	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Night	5	10	50	LOOSE_SAND	0	1.30	1.45	1.75	4.7	5.2	6.3	2.9	3.2	3.9
Night	5	10	50	LOOSE_SAND	5	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Night	5	10	50	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	5	10	50	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	5	10	50	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	5	10	50	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	5	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	5	10	50	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table F-3. Maximum Sustainable Speed, Night, 5% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	5	15	59	BLACK_TOP	-50	0.95	1.20	1.60	3.4	4.3	5.8	2.1	2.7	3.6
Night	5	15	59	BLACK_TOP	-40	1.10	1.30	1.75	4.0	4.7	6.3	2.5	2.9	3.9
Night	5	15	59	BLACK_TOP	-30	1.20	1.45	1.90	4.3	5.2	6.8	2.7	3.2	4.3
Night	5	15	59	BLACK_TOP	-20	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Night	5	15	59	BLACK_TOP	-15	1.45	1.75	2.20	5.2	6.3	7.9	3.2	3.9	4.9
Night	5	15	59	BLACK_TOP	-10	1.55	1.85	2.30	5.6	6.7	8.3	3.5	4.1	5.2
Night	5	15	59	BLACK_TOP	-5	1.65	1.95	2.40	5.9	7.0	8.6	3.7	4.4	5.4
Night	5	15	59	BLACK_TOP	0	1.80	2.05	2.50	6.5	7.4	9.0	4.0	4.6	5.6
Night	5	15	59	BLACK_TOP	5	1.30	1.55	2.00	4.7	5.6	7.2	2.9	3.5	4.5
Night	5	15	59	BLACK_TOP	10	0.95	1.20	1.60	3.4	4.3	5.8	2.1	2.7	3.6
Night	5	15	59	BLACK_TOP	15	0.75	0.95	1.30	2.7	3.4	4.7	1.7	2.1	2.9
Night	5	15	59	BLACK_TOP	20	0.60	0.75	1.10	2.2	2.7	4.0	1.3	1.7	2.5
Night	5	15	59	BLACK_TOP	30	0.40	0.55	0.80	1.4	2.0	2.9	0.9	1.2	1.8
Night	5	15	59	BLACK_TOP	40	0.30	0.40	0.65	1.1	1.4	2.3	0.7	0.9	1.5
Night	5	15	59	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	5	15	59	DIRT_ROAD	-50	0.90	1.10	1.50	3.2	4.0	5.4	2.0	2.5	3.4
Night	5	15	59	DIRT_ROAD	-40	1.00	1.25	1.65	3.6	4.5	5.9	2.2	2.8	3.7
Night	5	15	59	DIRT_ROAD	-30	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Night	5	15	59	DIRT_ROAD	-20	1.30	1.55	2.00	4.7	5.6	7.2	2.9	3.5	4.5
Night	5	15	59	DIRT_ROAD	-15	1.40	1.65	2.10	5.0	5.9	7.6	3.1	3.7	4.7
Night	5	15	59	DIRT_ROAD	-10	1.50	1.75	2.20	5.4	6.3	7.9	3.4	3.9	4.9
Night	5	15	59	DIRT_ROAD	-5	1.60	1.85	2.30	5.8	6.7	8.3	3.6	4.1	5.2
Night	5	15	59	DIRT_ROAD	0	1.70	1.95	2.40	6.1	7.0	8.6	3.8	4.4	5.4
Night	5	15	59	DIRT_ROAD	5	1.20	1.45	1.90	4.3	5.2	6.8	2.7	3.2	4.3
Night	5	15	59	DIRT_ROAD	10	0.90	1.10	1.50	3.2	4.0	5.4	2.0	2.5	3.4
Night	5	15	59	DIRT_ROAD	15	0.70	0.85	1.20	2.5	3.1	4.3	1.6	1.9	2.7
Night	5	15	59	DIRT_ROAD	20	0.55	0.70	1.00	2.0	2.5	3.6	1.2	1.6	2.2
Night	5	15	59	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Night	5	15	59	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	5	15	59	DIRT_ROAD	50	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Night	5	15	59	LOOSE_SAND	-50	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Night	5	15	59	LOOSE_SAND	-40	0.60	0.75	1.05	2.2	2.7	3.8	1.3	1.7	2.4
Night	5	15	59	LOOSE_SAND	-30	0.70	0.85	1.15	2.5	3.1	4.1	1.6	1.9	2.6
Night	5	15	59	LOOSE_SAND	-20	0.85	1.00	1.35	3.1	3.6	4.9	1.9	2.2	3.0
Night	5	15	59	LOOSE_SAND	-15	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Night	5	15	59	LOOSE_SAND	-10	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Night	5	15	59	LOOSE_SAND	-5	1.10	1.30	1.60	4.0	4.7	5.8	2.5	2.9	3.6
Night	5	15	59	LOOSE_SAND	0	1.20	1.40	1.75	4.3	5.0	6.3	2.7	3.1	3.9
Night	5	15	59	LOOSE_SAND	5	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Night	5	15	59	LOOSE_SAND	10	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Night	5	15	59	LOOSE_SAND	15	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Night	5	15	59	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	5	15	59	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Night	5	15	59	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	5	15	59	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table F-4. Maximum Sustainable Speed, Night, 5% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	5	20	68	BLACK_TOP	-50	0.90	1.10	1.50	3.2	4.0	5.4	2.0	2.5	3.4
Night	5	20	68	BLACK_TOP	-40	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Night	5	20	68	BLACK_TOP	-30	1.15	1.40	1.80	4.1	5.0	6.5	2.6	3.1	4.0
Night	5	20	68	BLACK_TOP	-20	1.30	1.55	1.95	4.7	5.6	7.0	2.9	3.5	4.4
Night	5	20	68	BLACK_TOP	-15	1.35	1.65	2.05	4.9	5.9	7.4	3.0	3.7	4.6
Night	5	20	68	BLACK_TOP	-10	1.45	1.75	2.15	5.2	6.3	7.7	3.2	3.9	4.8
Night	5	20	68	BLACK_TOP	-5	1.60	1.85	2.25	5.8	6.7	8.1	3.6	4.1	5.0
Night	5	20	68	BLACK_TOP	0	1.70	1.95	2.40	6.1	7.0	8.6	3.8	4.4	5.4
Night	5	20	68	BLACK_TOP	5	1.20	1.45	1.85	4.3	5.2	6.7	2.7	3.2	4.1
Night	5	20	68	BLACK_TOP	10	0.90	1.10	1.50	3.2	4.0	5.4	2.0	2.5	3.4
Night	5	20	68	BLACK_TOP	15	0.65	0.90	1.20	2.3	3.2	4.3	1.5	2.0	2.7
Night	5	20	68	BLACK_TOP	20	0.55	0.70	1.00	2.0	2.5	3.6	1.2	1.6	2.2
Night	5	20	68	BLACK_TOP	30	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Night	5	20	68	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	5	20	68	BLACK_TOP	50	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Night	5	20	68	DIRT_ROAD	-50	0.80	1.05	1.40	2.9	3.8	5.0	1.8	2.4	3.1
Night	5	20	68	DIRT_ROAD	-40	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Night	5	20	68	DIRT_ROAD	-30	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Night	5	20	68	DIRT_ROAD	-20	1.20	1.45	1.85	4.3	5.2	6.7	2.7	3.2	4.1
Night	5	20	68	DIRT_ROAD	-15	1.30	1.55	1.95	4.7	5.6	7.0	2.9	3.5	4.4
Night	5	20	68	DIRT_ROAD	-10	1.40	1.65	2.05	5.0	5.9	7.4	3.1	3.7	4.6
Night	5	20	68	DIRT_ROAD	-5	1.50	1.75	2.15	5.4	6.3	7.7	3.4	3.9	4.8
Night	5	20	68	DIRT_ROAD	0	1.60	1.85	2.25	5.8	6.7	8.1	3.6	4.1	5.0
Night	5	20	68	DIRT_ROAD	5	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Night	5	20	68	DIRT_ROAD	10	0.80	1.05	1.40	2.9	3.8	5.0	1.8	2.4	3.1
Night	5	20	68	DIRT_ROAD	15	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Night	5	20	68	DIRT_ROAD	20	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Night	5	20	68	DIRT_ROAD	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Night	5	20	68	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	5	20	68	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	5	20	68	LOOSE_SAND	-50	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Night	5	20	68	LOOSE_SAND	-40	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Night	5	20	68	LOOSE_SAND	-30	0.65	0.80	1.10	2.3	2.9	4.0	1.5	1.8	2.5
Night	5	20	68	LOOSE_SAND	-20	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Night	5	20	68	LOOSE_SAND	-15	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Night	5	20	68	LOOSE_SAND	-10	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Night	5	20	68	LOOSE_SAND	-5	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Night	5	20	68	LOOSE_SAND	0	1.15	1.35	1.65	4.1	4.9	5.9	2.6	3.0	3.7
Night	5	20	68	LOOSE_SAND	5	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Night	5	20	68	LOOSE_SAND	10	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Night	5	20	68	LOOSE_SAND	15	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Night	5	20	68	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	5	20	68	LOOSE_SAND	30	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Night	5	20	68	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Night	5	20	68	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table F-5. Maximum Sustainable Speed, Night, 5% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	5	25	77	BLACK_TOP	-50	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Night	5	25	77	BLACK_TOP	-40	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Night	5	25	77	BLACK_TOP	-30	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Night	5	25	77	BLACK_TOP	-20	1.20	1.45	1.85	4.3	5.2	6.7	2.7	3.2	4.1
Night	5	25	77	BLACK_TOP	-15	1.30	1.55	1.95	4.7	5.6	7.0	2.9	3.5	4.4
Night	5	25	77	BLACK_TOP	-10	1.35	1.65	2.05	4.9	5.9	7.4	3.0	3.7	4.6
Night	5	25	77	BLACK_TOP	-5	1.50	1.75	2.15	5.4	6.3	7.7	3.4	3.9	4.8
Night	5	25	77	BLACK_TOP	0	1.60	1.85	2.25	5.8	6.7	8.1	3.6	4.1	5.0
Night	5	25	77	BLACK_TOP	5	1.10	1.40	1.75	4.0	5.0	6.3	2.5	3.1	3.9
Night	5	25	77	BLACK_TOP	10	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Night	5	25	77	BLACK_TOP	15	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Night	5	25	77	BLACK_TOP	20	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Night	5	25	77	BLACK_TOP	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Night	5	25	77	BLACK_TOP	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	5	25	77	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	5	25	77	DIRT_ROAD	-50	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Night	5	25	77	DIRT_ROAD	-40	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Night	5	25	77	DIRT_ROAD	-30	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Night	5	25	77	DIRT_ROAD	-20	1.10	1.40	1.75	4.0	5.0	6.3	2.5	3.1	3.9
Night	5	25	77	DIRT_ROAD	-15	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Night	5	25	77	DIRT_ROAD	-10	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	5	25	77	DIRT_ROAD	-5	1.40	1.65	2.05	5.0	5.9	7.4	3.1	3.7	4.6
Night	5	25	77	DIRT_ROAD	0	1.50	1.80	2.15	5.4	6.5	7.7	3.4	4.0	4.8
Night	5	25	77	DIRT_ROAD	5	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Night	5	25	77	DIRT_ROAD	10	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Night	5	25	77	DIRT_ROAD	15	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Night	5	25	77	DIRT_ROAD	20	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Night	5	25	77	DIRT_ROAD	30	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Night	5	25	77	DIRT_ROAD	40	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Night	5	25	77	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	5	25	77	LOOSE_SAND	-50	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	5	25	77	LOOSE_SAND	-40	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Night	5	25	77	LOOSE_SAND	-30	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Night	5	25	77	LOOSE_SAND	-20	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Night	5	25	77	LOOSE_SAND	-15	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Night	5	25	77	LOOSE_SAND	-10	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Night	5	25	77	LOOSE_SAND	-5	1.00	1.15	1.45	3.6	4.1	5.2	2.2	2.6	3.2
Night	5	25	77	LOOSE_SAND	0	1.10	1.30	1.55	4.0	4.7	5.6	2.5	2.9	3.5
Night	5	25	77	LOOSE_SAND	5	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Night	5	25	77	LOOSE_SAND	10	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	5	25	77	LOOSE_SAND	15	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Night	5	25	77	LOOSE_SAND	20	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Night	5	25	77	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	5	25	77	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Night	5	25	77	LOOSE_SAND	50	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4

Table F-6. Maximum Sustainable Speed, Night, 5% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	5	30	86	BLACK_TOP	-50	0.70	0.95	1.25	2.5	3.4	4.5	1.6	2.1	2.8
Night	5	30	86	BLACK_TOP	-40	0.80	1.05	1.40	2.9	3.8	5.0	1.8	2.4	3.1
Night	5	30	86	BLACK_TOP	-30	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Night	5	30	86	BLACK_TOP	-20	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Night	5	30	86	BLACK_TOP	-15	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Night	5	30	86	BLACK_TOP	-10	1.25	1.55	1.90	4.5	5.6	6.8	2.8	3.5	4.3
Night	5	30	86	BLACK_TOP	-5	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Night	5	30	86	BLACK_TOP	0	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	5	30	86	BLACK_TOP	5	1.00	1.30	1.60	3.6	4.7	5.8	2.2	2.9	3.6
Night	5	30	86	BLACK_TOP	10	0.70	0.95	1.25	2.5	3.4	4.5	1.6	2.1	2.8
Night	5	30	86	BLACK_TOP	15	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Night	5	30	86	BLACK_TOP	20	0.40	0.60	0.80	1.4	2.2	2.9	0.9	1.3	1.8
Night	5	30	86	BLACK_TOP	30	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Night	5	30	86	BLACK_TOP	40	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Night	5	30	86	BLACK_TOP	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Night	5	30	86	DIRT_ROAD	-50	0.65	0.90	1.15	2.3	3.2	4.1	1.5	2.0	2.6
Night	5	30	86	DIRT_ROAD	-40	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Night	5	30	86	DIRT_ROAD	-30	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Night	5	30	86	DIRT_ROAD	-20	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Night	5	30	86	DIRT_ROAD	-15	1.10	1.40	1.70	4.0	5.0	6.1	2.5	3.1	3.8
Night	5	30	86	DIRT_ROAD	-10	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Night	5	30	86	DIRT_ROAD	-5	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Night	5	30	86	DIRT_ROAD	0	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	5	30	86	DIRT_ROAD	5	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	5	30	86	DIRT_ROAD	10	0.65	0.90	1.15	2.3	3.2	4.1	1.5	2.0	2.6
Night	5	30	86	DIRT_ROAD	15	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Night	5	30	86	DIRT_ROAD	20	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	5	30	86	DIRT_ROAD	30	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Night	5	30	86	DIRT_ROAD	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	5	30	86	DIRT_ROAD	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	5	30	86	LOOSE_SAND	-50	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Night	5	30	86	LOOSE_SAND	-40	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	5	30	86	LOOSE_SAND	-30	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	5	30	86	LOOSE_SAND	-20	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Night	5	30	86	LOOSE_SAND	-15	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Night	5	30	86	LOOSE_SAND	-10	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Night	5	30	86	LOOSE_SAND	-5	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Night	5	30	86	LOOSE_SAND	0	1.00	1.20	1.45	3.6	4.3	5.2	2.2	2.7	3.2
Night	5	30	86	LOOSE_SAND	5	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Night	5	30	86	LOOSE_SAND	10	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Night	5	30	86	LOOSE_SAND	15	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	5	30	86	LOOSE_SAND	20	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	5	30	86	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	5	30	86	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	5	30	86	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table F-7. Maximum Sustainable Speed, Night, 5% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	5	35	95	BLACK_TOP	-50	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Night	5	35	95	BLACK_TOP	-40	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Night	5	35	95	BLACK_TOP	-30	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Night	5	35	95	BLACK_TOP	-20	1.00	1.30	1.55	3.6	4.7	5.6	2.2	2.9	3.5
Night	5	35	95	BLACK_TOP	-15	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Night	5	35	95	BLACK_TOP	-10	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Night	5	35	95	BLACK_TOP	-5	1.25	1.55	1.85	4.5	5.6	6.7	2.8	3.5	4.1
Night	5	35	95	BLACK_TOP	0	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	5	35	95	BLACK_TOP	5	0.90	1.20	1.50	3.2	4.3	5.4	2.0	2.7	3.4
Night	5	35	95	BLACK_TOP	10	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Night	5	35	95	BLACK_TOP	15	0.45	0.65	0.90	1.6	2.3	3.2	1.0	1.5	2.0
Night	5	35	95	BLACK_TOP	20	0.35	0.55	0.70	1.3	2.0	2.5	0.8	1.2	1.6
Night	5	35	95	BLACK_TOP	30	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	5	35	95	BLACK_TOP	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	5	35	95	BLACK_TOP	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	5	35	95	DIRT_ROAD	-50	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Night	5	35	95	DIRT_ROAD	-40	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Night	5	35	95	DIRT_ROAD	-30	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Night	5	35	95	DIRT_ROAD	-20	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Night	5	35	95	DIRT_ROAD	-15	1.00	1.30	1.55	3.6	4.7	5.6	2.2	2.9	3.5
Night	5	35	95	DIRT_ROAD	-10	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Night	5	35	95	DIRT_ROAD	-5	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Night	5	35	95	DIRT_ROAD	0	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Night	5	35	95	DIRT_ROAD	5	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Night	5	35	95	DIRT_ROAD	10	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Night	5	35	95	DIRT_ROAD	15	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	5	35	95	DIRT_ROAD	20	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	5	35	95	DIRT_ROAD	30	0.20	0.35	0.45	0.7	1.3	1.6	0.4	0.8	1.0
Night	5	35	95	DIRT_ROAD	40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Night	5	35	95	DIRT_ROAD	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	5	35	95	LOOSE_SAND	-50	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	5	35	95	LOOSE_SAND	-40	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	5	35	95	LOOSE_SAND	-30	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Night	5	35	95	LOOSE_SAND	-20	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Night	5	35	95	LOOSE_SAND	-15	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Night	5	35	95	LOOSE_SAND	-10	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Night	5	35	95	LOOSE_SAND	-5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	5	35	95	LOOSE_SAND	0	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Night	5	35	95	LOOSE_SAND	5	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Night	5	35	95	LOOSE_SAND	10	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	5	35	95	LOOSE_SAND	15	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	5	35	95	LOOSE_SAND	20	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Night	5	35	95	LOOSE_SAND	30	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Night	5	35	95	LOOSE_SAND	40	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Night	5	35	95	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table F-8. Maximum Sustainable Speed, Night, 25% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	25	5	41	BLACK_TOP	-50	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Night	25	5	41	BLACK_TOP	-40	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Night	25	5	41	BLACK_TOP	-30	1.35	1.65	1.90	4.9	5.9	6.8	3.0	3.7	4.3
Night	25	5	41	BLACK_TOP	-20	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	25	5	41	BLACK_TOP	-15	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	25	5	41	BLACK_TOP	-10	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	25	5	41	BLACK_TOP	-5	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	25	5	41	BLACK_TOP	0	1.90	2.20	2.50	6.8	7.9	9.0	4.3	4.9	5.6
Night	25	5	41	BLACK_TOP	5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	25	5	41	BLACK_TOP	10	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Night	25	5	41	BLACK_TOP	15	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Night	25	5	41	BLACK_TOP	20	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Night	25	5	41	BLACK_TOP	30	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Night	25	5	41	BLACK_TOP	40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	25	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	25	5	41	DIRT_ROAD	-50	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	25	5	41	DIRT_ROAD	-40	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Night	25	5	41	DIRT_ROAD	-30	1.25	1.55	1.80	4.5	5.6	6.5	2.8	3.5	4.0
Night	25	5	41	DIRT_ROAD	-20	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	25	5	41	DIRT_ROAD	-15	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	25	5	41	DIRT_ROAD	-10	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	25	5	41	DIRT_ROAD	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	25	5	41	DIRT_ROAD	0	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	25	5	41	DIRT_ROAD	5	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Night	25	5	41	DIRT_ROAD	10	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	25	5	41	DIRT_ROAD	15	0.75	1.00	1.20	2.7	3.6	4.3	1.7	2.2	2.7
Night	25	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Night	25	5	41	DIRT_ROAD	30	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Night	25	5	41	DIRT_ROAD	40	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	25	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	5	41	LOOSE_SAND	-50	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	25	5	41	LOOSE_SAND	-40	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Night	25	5	41	LOOSE_SAND	-30	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Night	25	5	41	LOOSE_SAND	-20	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Night	25	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Night	25	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Night	25	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Night	25	5	41	LOOSE_SAND	0	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Night	25	5	41	LOOSE_SAND	5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	25	5	41	LOOSE_SAND	10	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	25	5	41	LOOSE_SAND	15	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Night	25	5	41	LOOSE_SAND	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	25	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	25	5	41	LOOSE_SAND	40	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Night	25	5	41	LOOSE_SAND	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6

Table F-9. Maximum Sustainable Speed, Night, 25 % Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	25	10	50	BLACK_TOP	-50	1.05	1.25	1.60	3.8	4.5	5.8	2.4	2.8	3.6
Night	25	10	50	BLACK_TOP	-40	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Night	25	10	50	BLACK_TOP	-30	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	25	10	50	BLACK_TOP	-20	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Night	25	10	50	BLACK_TOP	-15	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Night	25	10	50	BLACK_TOP	-10	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Night	25	10	50	BLACK_TOP	-5	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Night	25	10	50	BLACK_TOP	0	1.85	2.15	2.50	6.7	7.7	9.0	4.1	4.8	5.6
Night	25	10	50	BLACK_TOP	5	1.35	1.65	2.00	4.9	5.9	7.2	3.0	3.7	4.5
Night	25	10	50	BLACK_TOP	10	1.05	1.25	1.60	3.8	4.5	5.8	2.4	2.8	3.6
Night	25	10	50	BLACK_TOP	15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Night	25	10	50	BLACK_TOP	20	0.65	0.80	1.10	2.3	2.9	4.0	1.5	1.8	2.5
Night	25	10	50	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	25	10	50	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Night	25	10	50	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	25	10	50	DIRT_ROAD	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Night	25	10	50	DIRT_ROAD	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Night	25	10	50	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Night	25	10	50	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Night	25	10	50	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Night	25	10	50	DIRT_ROAD	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Night	25	10	50	DIRT_ROAD	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Night	25	10	50	DIRT_ROAD	0	1.80	2.05	2.40	6.5	7.4	8.6	4.0	4.6	5.4
Night	25	10	50	DIRT_ROAD	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	25	10	50	DIRT_ROAD	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Night	25	10	50	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Night	25	10	50	DIRT_ROAD	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Night	25	10	50	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	25	10	50	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	25	10	50	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	10	50	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	25	10	50	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Night	25	10	50	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Night	25	10	50	LOOSE_SAND	-20	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Night	25	10	50	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Night	25	10	50	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Night	25	10	50	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Night	25	10	50	LOOSE_SAND	0	1.30	1.45	1.75	4.7	5.2	6.3	2.9	3.2	3.9
Night	25	10	50	LOOSE_SAND	5	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Night	25	10	50	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	25	10	50	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Night	25	10	50	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	25	10	50	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	25	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	25	10	50	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table F-10. Maximum Sustainable Speed, Night, 25% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	25	15	59	BLACK_TOP	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	25	15	59	BLACK_TOP	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Night	25	15	59	BLACK_TOP	-30	1.20	1.45	1.85	4.3	5.2	6.7	2.7	3.2	4.1
Night	25	15	59	BLACK_TOP	-20	1.35	1.65	2.00	4.9	5.9	7.2	3.0	3.7	4.5
Night	25	15	59	BLACK_TOP	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Night	25	15	59	BLACK_TOP	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Night	25	15	59	BLACK_TOP	-5	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Night	25	15	59	BLACK_TOP	0	1.75	2.05	2.45	6.3	7.4	8.8	3.9	4.6	5.5
Night	25	15	59	BLACK_TOP	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	25	15	59	BLACK_TOP	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	25	15	59	BLACK_TOP	15	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Night	25	15	59	BLACK_TOP	20	0.60	0.75	1.05	2.2	2.7	3.8	1.3	1.7	2.4
Night	25	15	59	BLACK_TOP	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	25	15	59	BLACK_TOP	40	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Night	25	15	59	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	15	59	DIRT_ROAD	-50	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Night	25	15	59	DIRT_ROAD	-40	1.00	1.20	1.55	3.6	4.3	5.6	2.2	2.7	3.5
Night	25	15	59	DIRT_ROAD	-30	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Night	25	15	59	DIRT_ROAD	-20	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	25	15	59	DIRT_ROAD	-15	1.35	1.65	2.00	4.9	5.9	7.2	3.0	3.7	4.5
Night	25	15	59	DIRT_ROAD	-10	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Night	25	15	59	DIRT_ROAD	-5	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Night	25	15	59	DIRT_ROAD	0	1.70	1.95	2.30	6.1	7.0	8.3	3.8	4.4	5.2
Night	25	15	59	DIRT_ROAD	5	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Night	25	15	59	DIRT_ROAD	10	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Night	25	15	59	DIRT_ROAD	15	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Night	25	15	59	DIRT_ROAD	20	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Night	25	15	59	DIRT_ROAD	30	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Night	25	15	59	DIRT_ROAD	40	0.30	0.35	0.55	1.1	1.3	2.0	0.7	0.8	1.2
Night	25	15	59	DIRT_ROAD	50	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Night	25	15	59	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Night	25	15	59	LOOSE_SAND	-40	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Night	25	15	59	LOOSE_SAND	-30	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Night	25	15	59	LOOSE_SAND	-20	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Night	25	15	59	LOOSE_SAND	-15	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Night	25	15	59	LOOSE_SAND	-10	1.00	1.20	1.45	3.6	4.3	5.2	2.2	2.7	3.2
Night	25	15	59	LOOSE_SAND	-5	1.10	1.30	1.55	4.0	4.7	5.6	2.5	2.9	3.5
Night	25	15	59	LOOSE_SAND	0	1.20	1.40	1.65	4.3	5.0	5.9	2.7	3.1	3.7
Night	25	15	59	LOOSE_SAND	5	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Night	25	15	59	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Night	25	15	59	LOOSE_SAND	15	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	25	15	59	LOOSE_SAND	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	25	15	59	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	25	15	59	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	25	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table F-11. Maximum Sustainable Speed, Night, 25% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	25	20	68	BLACK_TOP	-50	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Night	25	20	68	BLACK_TOP	-40	1.00	1.20	1.55	3.6	4.3	5.6	2.2	2.7	3.5
Night	25	20	68	BLACK_TOP	-30	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Night	25	20	68	BLACK_TOP	-20	1.25	1.55	1.85	4.5	5.6	6.7	2.8	3.5	4.1
Night	25	20	68	BLACK_TOP	-15	1.35	1.65	1.95	4.9	5.9	7.0	3.0	3.7	4.4
Night	25	20	68	BLACK_TOP	-10	1.45	1.75	2.05	5.2	6.3	7.4	3.2	3.9	4.6
Night	25	20	68	BLACK_TOP	-5	1.55	1.85	2.15	5.6	6.7	7.7	3.5	4.1	4.8
Night	25	20	68	BLACK_TOP	0	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Night	25	20	68	BLACK_TOP	5	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Night	25	20	68	BLACK_TOP	10	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Night	25	20	68	BLACK_TOP	15	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Night	25	20	68	BLACK_TOP	20	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	25	20	68	BLACK_TOP	30	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	25	20	68	BLACK_TOP	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	25	20	68	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	25	20	68	DIRT_ROAD	-50	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Night	25	20	68	DIRT_ROAD	-40	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Night	25	20	68	DIRT_ROAD	-30	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Night	25	20	68	DIRT_ROAD	-20	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Night	25	20	68	DIRT_ROAD	-15	1.30	1.55	1.85	4.7	5.6	6.7	2.9	3.5	4.1
Night	25	20	68	DIRT_ROAD	-10	1.35	1.65	1.95	4.9	5.9	7.0	3.0	3.7	4.4
Night	25	20	68	DIRT_ROAD	-5	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Night	25	20	68	DIRT_ROAD	0	1.60	1.85	2.15	5.8	6.7	7.7	3.6	4.1	4.8
Night	25	20	68	DIRT_ROAD	5	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Night	25	20	68	DIRT_ROAD	10	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Night	25	20	68	DIRT_ROAD	15	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Night	25	20	68	DIRT_ROAD	20	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Night	25	20	68	DIRT_ROAD	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	25	20	68	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	20	68	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	25	20	68	LOOSE_SAND	-50	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	25	20	68	LOOSE_SAND	-40	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	25	20	68	LOOSE_SAND	-30	0.65	0.80	1.00	2.3	2.9	3.6	1.5	1.8	2.2
Night	25	20	68	LOOSE_SAND	-20	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Night	25	20	68	LOOSE_SAND	-15	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	25	20	68	LOOSE_SAND	-10	0.95	1.10	1.35	3.4	4.0	4.9	2.1	2.5	3.0
Night	25	20	68	LOOSE_SAND	-5	1.05	1.20	1.45	3.8	4.3	5.2	2.4	2.7	3.2
Night	25	20	68	LOOSE_SAND	0	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Night	25	20	68	LOOSE_SAND	5	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Night	25	20	68	LOOSE_SAND	10	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	25	20	68	LOOSE_SAND	15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	25	20	68	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	20	68	LOOSE_SAND	30	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Night	25	20	68	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Night	25	20	68	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table F-12. Maximum Sustainable Speed, Night, 25% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	25	25	77	BLACK_TOP	-50	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Night	25	25	77	BLACK_TOP	-40	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Night	25	25	77	BLACK_TOP	-30	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Night	25	25	77	BLACK_TOP	-20	1.15	1.45	1.70	4.1	5.2	6.1	2.6	3.2	3.8
Night	25	25	77	BLACK_TOP	-15	1.25	1.55	1.80	4.5	5.6	6.5	2.8	3.5	4.0
Night	25	25	77	BLACK_TOP	-10	1.35	1.65	1.90	4.9	5.9	6.8	3.0	3.7	4.3
Night	25	25	77	BLACK_TOP	-5	1.45	1.75	2.00	5.2	6.3	7.2	3.2	3.9	4.5
Night	25	25	77	BLACK_TOP	0	1.55	1.85	2.10	5.6	6.7	7.6	3.5	4.1	4.7
Night	25	25	77	BLACK_TOP	5	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Night	25	25	77	BLACK_TOP	10	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Night	25	25	77	BLACK_TOP	15	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Night	25	25	77	BLACK_TOP	20	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Night	25	25	77	BLACK_TOP	30	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Night	25	25	77	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	25	77	BLACK_TOP	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	25	25	77	DIRT_ROAD	-50	0.70	0.95	1.15	2.5	3.4	4.1	1.6	2.1	2.6
Night	25	25	77	DIRT_ROAD	-40	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Night	25	25	77	DIRT_ROAD	-30	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Night	25	25	77	DIRT_ROAD	-20	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Night	25	25	77	DIRT_ROAD	-15	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Night	25	25	77	DIRT_ROAD	-10	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Night	25	25	77	DIRT_ROAD	-5	1.40	1.65	1.90	5.0	5.9	6.8	3.1	3.7	4.3
Night	25	25	77	DIRT_ROAD	0	1.50	1.75	2.00	5.4	6.3	7.2	3.4	3.9	4.5
Night	25	25	77	DIRT_ROAD	5	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	25	25	77	DIRT_ROAD	10	0.70	0.95	1.15	2.5	3.4	4.1	1.6	2.1	2.6
Night	25	25	77	DIRT_ROAD	15	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	25	25	77	DIRT_ROAD	20	0.40	0.60	0.75	1.4	2.2	2.7	0.9	1.3	1.7
Night	25	25	77	DIRT_ROAD	30	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	25	25	77	DIRT_ROAD	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	25	25	77	DIRT_ROAD	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Night	25	25	77	LOOSE_SAND	-50	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	25	25	77	LOOSE_SAND	-40	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Night	25	25	77	LOOSE_SAND	-30	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	25	25	77	LOOSE_SAND	-20	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Night	25	25	77	LOOSE_SAND	-15	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Night	25	25	77	LOOSE_SAND	-10	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	25	25	77	LOOSE_SAND	-5	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Night	25	25	77	LOOSE_SAND	0	1.05	1.25	1.45	3.8	4.5	5.2	2.4	2.8	3.2
Night	25	25	77	LOOSE_SAND	5	0.65	0.80	1.00	2.3	2.9	3.6	1.5	1.8	2.2
Night	25	25	77	LOOSE_SAND	10	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	25	25	77	LOOSE_SAND	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	25	25	77	LOOSE_SAND	20	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	25	25	77	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	25	25	77	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	25	25	77	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table F-13. Maximum Sustainable Speed, Night, 25% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	25	30	86	BLACK_TOP	-50	0.70	0.95	1.10	2.5	3.4	4.0	1.6	2.1	2.5
Night	25	30	86	BLACK_TOP	-40	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Night	25	30	86	BLACK_TOP	-30	0.90	1.20	1.35	3.2	4.3	4.9	2.0	2.7	3.0
Night	25	30	86	BLACK_TOP	-20	1.05	1.35	1.50	3.8	4.9	5.4	2.4	3.0	3.4
Night	25	30	86	BLACK_TOP	-15	1.15	1.45	1.60	4.1	5.2	5.8	2.6	3.2	3.6
Night	25	30	86	BLACK_TOP	-10	1.25	1.55	1.70	4.5	5.6	6.1	2.8	3.5	3.8
Night	25	30	86	BLACK_TOP	-5	1.35	1.65	1.80	4.9	5.9	6.5	3.0	3.7	4.0
Night	25	30	86	BLACK_TOP	0	1.45	1.75	1.95	5.2	6.3	7.0	3.2	3.9	4.4
Night	25	30	86	BLACK_TOP	5	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Night	25	30	86	BLACK_TOP	10	0.70	0.95	1.10	2.5	3.4	4.0	1.6	2.1	2.5
Night	25	30	86	BLACK_TOP	15	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Night	25	30	86	BLACK_TOP	20	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	25	30	86	BLACK_TOP	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	25	30	86	BLACK_TOP	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	25	30	86	BLACK_TOP	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Night	25	30	86	DIRT_ROAD	-50	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Night	25	30	86	DIRT_ROAD	-40	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Night	25	30	86	DIRT_ROAD	-30	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Night	25	30	86	DIRT_ROAD	-20	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Night	25	30	86	DIRT_ROAD	-15	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Night	25	30	86	DIRT_ROAD	-10	1.15	1.45	1.60	4.1	5.2	5.8	2.6	3.2	3.6
Night	25	30	86	DIRT_ROAD	-5	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Night	25	30	86	DIRT_ROAD	0	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Night	25	30	86	DIRT_ROAD	5	0.90	1.20	1.35	3.2	4.3	4.9	2.0	2.7	3.0
Night	25	30	86	DIRT_ROAD	10	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Night	25	30	86	DIRT_ROAD	15	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Night	25	30	86	DIRT_ROAD	20	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	25	30	86	DIRT_ROAD	30	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	30	86	DIRT_ROAD	40	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	25	30	86	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	25	30	86	LOOSE_SAND	-50	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Night	25	30	86	LOOSE_SAND	-40	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Night	25	30	86	LOOSE_SAND	-30	0.50	0.70	0.80	1.8	2.5	2.9	1.1	1.6	1.8
Night	25	30	86	LOOSE_SAND	-20	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Night	25	30	86	LOOSE_SAND	-15	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Night	25	30	86	LOOSE_SAND	-10	0.80	1.00	1.10	2.9	3.6	4.0	1.8	2.2	2.5
Night	25	30	86	LOOSE_SAND	-5	0.90	1.10	1.20	3.2	4.0	4.3	2.0	2.5	2.7
Night	25	30	86	LOOSE_SAND	0	1.00	1.20	1.30	3.6	4.3	4.7	2.2	2.7	2.9
Night	25	30	86	LOOSE_SAND	5	0.55	0.75	0.85	2.0	2.7	3.1	1.2	1.7	1.9
Night	25	30	86	LOOSE_SAND	10	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Night	25	30	86	LOOSE_SAND	15	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	25	30	86	LOOSE_SAND	20	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	25	30	86	LOOSE_SAND	30	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Night	25	30	86	LOOSE_SAND	40	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Night	25	30	86	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table F-14. Maximum Sustainable Speed, Night, 25% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	25	35	95	BLACK_TOP	-50	0.60	0.80	0.90	2.2	2.9	3.2	1.3	1.8	2.0
Night	25	35	95	BLACK_TOP	-40	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Night	25	35	95	BLACK_TOP	-30	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Night	25	35	95	BLACK_TOP	-20	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Night	25	35	95	BLACK_TOP	-15	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Night	25	35	95	BLACK_TOP	-10	1.15	1.35	1.50	4.1	4.9	5.4	2.6	3.0	3.4
Night	25	35	95	BLACK_TOP	-5	1.25	1.45	1.60	4.5	5.2	5.8	2.8	3.2	3.6
Night	25	35	95	BLACK_TOP	0	1.35	1.55	1.70	4.9	5.6	6.1	3.0	3.5	3.8
Night	25	35	95	BLACK_TOP	5	0.90	1.10	1.25	3.2	4.0	4.5	2.0	2.5	2.8
Night	25	35	95	BLACK_TOP	10	0.60	0.80	0.90	2.2	2.9	3.2	1.3	1.8	2.0
Night	25	35	95	BLACK_TOP	15	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Night	25	35	95	BLACK_TOP	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	25	35	95	BLACK_TOP	30	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Night	25	35	95	BLACK_TOP	40	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Night	25	35	95	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	25	35	95	DIRT_ROAD	-50	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	25	35	95	DIRT_ROAD	-40	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Night	25	35	95	DIRT_ROAD	-30	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Night	25	35	95	DIRT_ROAD	-20	0.90	1.10	1.25	3.2	4.0	4.5	2.0	2.5	2.8
Night	25	35	95	DIRT_ROAD	-15	0.95	1.20	1.30	3.4	4.3	4.7	2.1	2.7	2.9
Night	25	35	95	DIRT_ROAD	-10	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Night	25	35	95	DIRT_ROAD	-5	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Night	25	35	95	DIRT_ROAD	0	1.30	1.50	1.65	4.7	5.4	5.9	2.9	3.4	3.7
Night	25	35	95	DIRT_ROAD	5	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Night	25	35	95	DIRT_ROAD	10	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	25	35	95	DIRT_ROAD	15	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Night	25	35	95	DIRT_ROAD	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	25	35	95	DIRT_ROAD	30	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	25	35	95	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	25	35	95	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	25	35	95	LOOSE_SAND	-50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	25	35	95	LOOSE_SAND	-40	0.35	0.50	0.55	1.3	1.8	2.0	0.8	1.1	1.2
Night	25	35	95	LOOSE_SAND	-30	0.45	0.60	0.65	1.6	2.2	2.3	1.0	1.3	1.5
Night	25	35	95	LOOSE_SAND	-20	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Night	25	35	95	LOOSE_SAND	-15	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Night	25	35	95	LOOSE_SAND	-10	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Night	25	35	95	LOOSE_SAND	-5	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Night	25	35	95	LOOSE_SAND	0	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Night	25	35	95	LOOSE_SAND	5	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Night	25	35	95	LOOSE_SAND	10	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	25	35	95	LOOSE_SAND	15	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	25	35	95	LOOSE_SAND	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	25	35	95	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	25	35	95	LOOSE_SAND	40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Night	25	35	95	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table F-15. Maximum Sustainable Speed, Night, 50% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	50	5	41	BLACK_TOP	-50	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Night	50	5	41	BLACK_TOP	-40	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Night	50	5	41	BLACK_TOP	-30	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Night	50	5	41	BLACK_TOP	-20	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	50	5	41	BLACK_TOP	-15	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	50	5	41	BLACK_TOP	-10	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	50	5	41	BLACK_TOP	-5	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	50	5	41	BLACK_TOP	0	1.90	2.20	2.50	6.8	7.9	9.0	4.3	4.9	5.6
Night	50	5	41	BLACK_TOP	5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	50	5	41	BLACK_TOP	10	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Night	50	5	41	BLACK_TOP	15	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Night	50	5	41	BLACK_TOP	20	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Night	50	5	41	BLACK_TOP	30	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Night	50	5	41	BLACK_TOP	40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	50	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	50	5	41	DIRT_ROAD	-50	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	50	5	41	DIRT_ROAD	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Night	50	5	41	DIRT_ROAD	-30	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Night	50	5	41	DIRT_ROAD	-20	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	50	5	41	DIRT_ROAD	-15	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	50	5	41	DIRT_ROAD	-10	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	50	5	41	DIRT_ROAD	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	50	5	41	DIRT_ROAD	0	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	50	5	41	DIRT_ROAD	5	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Night	50	5	41	DIRT_ROAD	10	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	50	5	41	DIRT_ROAD	15	0.75	1.00	1.20	2.7	3.6	4.3	1.7	2.2	2.7
Night	50	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Night	50	5	41	DIRT_ROAD	30	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Night	50	5	41	DIRT_ROAD	40	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Night	50	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	50	5	41	LOOSE_SAND	-50	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	50	5	41	LOOSE_SAND	-40	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Night	50	5	41	LOOSE_SAND	-30	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Night	50	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Night	50	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Night	50	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Night	50	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Night	50	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Night	50	5	41	LOOSE_SAND	5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	50	5	41	LOOSE_SAND	10	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	50	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	50	5	41	LOOSE_SAND	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	50	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	50	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	50	5	41	LOOSE_SAND	50	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6

Table F-16. Maximum Sustainable Speed, Night, 50% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	50	10	50	BLACK_TOP	-50	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Night	50	10	50	BLACK_TOP	-40	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Night	50	10	50	BLACK_TOP	-30	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Night	50	10	50	BLACK_TOP	-20	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Night	50	10	50	BLACK_TOP	-15	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Night	50	10	50	BLACK_TOP	-10	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Night	50	10	50	BLACK_TOP	-5	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Night	50	10	50	BLACK_TOP	0	1.85	2.10	2.50	6.7	7.6	9.0	4.1	4.7	5.6
Night	50	10	50	BLACK_TOP	5	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Night	50	10	50	BLACK_TOP	10	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Night	50	10	50	BLACK_TOP	15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Night	50	10	50	BLACK_TOP	20	0.65	0.80	1.10	2.3	2.9	4.0	1.5	1.8	2.5
Night	50	10	50	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	50	10	50	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Night	50	10	50	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	50	10	50	DIRT_ROAD	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Night	50	10	50	DIRT_ROAD	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Night	50	10	50	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Night	50	10	50	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Night	50	10	50	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Night	50	10	50	DIRT_ROAD	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Night	50	10	50	DIRT_ROAD	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Night	50	10	50	DIRT_ROAD	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Night	50	10	50	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Night	50	10	50	DIRT_ROAD	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Night	50	10	50	DIRT_ROAD	15	0.75	0.90	1.20	2.7	3.2	4.3	1.7	2.0	2.7
Night	50	10	50	DIRT_ROAD	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Night	50	10	50	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	50	10	50	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	50	10	50	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Night	50	10	50	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	50	10	50	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Night	50	10	50	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Night	50	10	50	LOOSE_SAND	-20	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Night	50	10	50	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Night	50	10	50	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Night	50	10	50	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Night	50	10	50	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Night	50	10	50	LOOSE_SAND	5	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Night	50	10	50	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Night	50	10	50	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Night	50	10	50	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	50	10	50	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Night	50	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	50	10	50	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table F-17. Maximum Sustainable Speed, Night, 50% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	50	15	59	BLACK_TOP	-50	0.95	1.15	1.45	3.4	4.1	5.2	2.1	2.6	3.2
Night	50	15	59	BLACK_TOP	-40	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Night	50	15	59	BLACK_TOP	-30	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Night	50	15	59	BLACK_TOP	-20	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Night	50	15	59	BLACK_TOP	-15	1.45	1.70	2.00	5.2	6.1	7.2	3.2	3.8	4.5
Night	50	15	59	BLACK_TOP	-10	1.55	1.80	2.10	5.6	6.5	7.6	3.5	4.0	4.7
Night	50	15	59	BLACK_TOP	-5	1.65	1.90	2.25	5.9	6.8	8.1	3.7	4.3	5.0
Night	50	15	59	BLACK_TOP	0	1.75	2.00	2.35	6.3	7.2	8.5	3.9	4.5	5.3
Night	50	15	59	BLACK_TOP	5	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Night	50	15	59	BLACK_TOP	10	0.95	1.15	1.45	3.4	4.1	5.2	2.1	2.6	3.2
Night	50	15	59	BLACK_TOP	15	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Night	50	15	59	BLACK_TOP	20	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Night	50	15	59	BLACK_TOP	30	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	50	15	59	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	50	15	59	BLACK_TOP	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Night	50	15	59	DIRT_ROAD	-50	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Night	50	15	59	DIRT_ROAD	-40	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	50	15	59	DIRT_ROAD	-30	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Night	50	15	59	DIRT_ROAD	-20	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Night	50	15	59	DIRT_ROAD	-15	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Night	50	15	59	DIRT_ROAD	-10	1.45	1.70	2.00	5.2	6.1	7.2	3.2	3.8	4.5
Night	50	15	59	DIRT_ROAD	-5	1.55	1.80	2.10	5.6	6.5	7.6	3.5	4.0	4.7
Night	50	15	59	DIRT_ROAD	0	1.65	1.95	2.25	5.9	7.0	8.1	3.7	4.4	5.0
Night	50	15	59	DIRT_ROAD	5	1.20	1.45	1.70	4.3	5.2	6.1	2.7	3.2	3.8
Night	50	15	59	DIRT_ROAD	10	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Night	50	15	59	DIRT_ROAD	15	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Night	50	15	59	DIRT_ROAD	20	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Night	50	15	59	DIRT_ROAD	30	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	50	15	59	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	50	15	59	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	50	15	59	LOOSE_SAND	-50	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Night	50	15	59	LOOSE_SAND	-40	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	50	15	59	LOOSE_SAND	-30	0.70	0.85	1.05	2.5	3.1	3.8	1.6	1.9	2.4
Night	50	15	59	LOOSE_SAND	-20	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Night	50	15	59	LOOSE_SAND	-15	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Night	50	15	59	LOOSE_SAND	-10	1.00	1.15	1.40	3.6	4.1	5.0	2.2	2.6	3.1
Night	50	15	59	LOOSE_SAND	-5	1.10	1.25	1.50	4.0	4.5	5.4	2.5	2.8	3.4
Night	50	15	59	LOOSE_SAND	0	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Night	50	15	59	LOOSE_SAND	5	0.75	0.90	1.10	2.7	3.2	4.0	1.7	2.0	2.5
Night	50	15	59	LOOSE_SAND	10	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Night	50	15	59	LOOSE_SAND	15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	50	15	59	LOOSE_SAND	20	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Night	50	15	59	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	50	15	59	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	50	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table F-18. Maximum Sustainable Speed, Night, 50% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	50	20	68	BLACK_TOP	-50	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Night	50	20	68	BLACK_TOP	-40	0.95	1.20	1.40	3.4	4.3	5.0	2.1	2.7	3.1
Night	50	20	68	BLACK_TOP	-30	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Night	50	20	68	BLACK_TOP	-20	1.25	1.50	1.75	4.5	5.4	6.3	2.8	3.4	3.9
Night	50	20	68	BLACK_TOP	-15	1.35	1.60	1.85	4.9	5.8	6.7	3.0	3.6	4.1
Night	50	20	68	BLACK_TOP	-10	1.45	1.70	1.95	5.2	6.1	7.0	3.2	3.8	4.4
Night	50	20	68	BLACK_TOP	-5	1.55	1.80	2.05	5.6	6.5	7.4	3.5	4.0	4.6
Night	50	20	68	BLACK_TOP	0	1.65	1.90	2.15	5.9	6.8	7.7	3.7	4.3	4.8
Night	50	20	68	BLACK_TOP	5	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Night	50	20	68	BLACK_TOP	10	0.85	1.10	1.30	3.1	4.0	4.7	1.9	2.5	2.9
Night	50	20	68	BLACK_TOP	15	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Night	50	20	68	BLACK_TOP	20	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Night	50	20	68	BLACK_TOP	30	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Night	50	20	68	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	50	20	68	BLACK_TOP	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	50	20	68	DIRT_ROAD	-50	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Night	50	20	68	DIRT_ROAD	-40	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Night	50	20	68	DIRT_ROAD	-30	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Night	50	20	68	DIRT_ROAD	-20	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Night	50	20	68	DIRT_ROAD	-15	1.25	1.50	1.75	4.5	5.4	6.3	2.8	3.4	3.9
Night	50	20	68	DIRT_ROAD	-10	1.35	1.60	1.85	4.9	5.8	6.7	3.0	3.6	4.1
Night	50	20	68	DIRT_ROAD	-5	1.45	1.70	1.95	5.2	6.1	7.0	3.2	3.8	4.4
Night	50	20	68	DIRT_ROAD	0	1.55	1.85	2.05	5.6	6.7	7.4	3.5	4.1	4.6
Night	50	20	68	DIRT_ROAD	5	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Night	50	20	68	DIRT_ROAD	10	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Night	50	20	68	DIRT_ROAD	15	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Night	50	20	68	DIRT_ROAD	20	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Night	50	20	68	DIRT_ROAD	30	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Night	50	20	68	DIRT_ROAD	40	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Night	50	20	68	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	50	20	68	LOOSE_SAND	-50	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Night	50	20	68	LOOSE_SAND	-40	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Night	50	20	68	LOOSE_SAND	-30	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Night	50	20	68	LOOSE_SAND	-20	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Night	50	20	68	LOOSE_SAND	-15	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Night	50	20	68	LOOSE_SAND	-10	0.90	1.10	1.25	3.2	4.0	4.5	2.0	2.5	2.8
Night	50	20	68	LOOSE_SAND	-5	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Night	50	20	68	LOOSE_SAND	0	1.15	1.30	1.50	4.1	4.7	5.4	2.6	2.9	3.4
Night	50	20	68	LOOSE_SAND	5	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Night	50	20	68	LOOSE_SAND	10	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Night	50	20	68	LOOSE_SAND	15	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Night	50	20	68	LOOSE_SAND	20	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Night	50	20	68	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	50	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	50	20	68	LOOSE_SAND	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3

Table F-19. Maximum Sustainable Speed, Night, 50% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	50	25	77	BLACK_TOP	-50	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Night	50	25	77	BLACK_TOP	-40	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Night	50	25	77	BLACK_TOP	-30	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Night	50	25	77	BLACK_TOP	-20	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Night	50	25	77	BLACK_TOP	-15	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Night	50	25	77	BLACK_TOP	-10	1.30	1.55	1.70	4.7	5.6	6.1	2.9	3.5	3.8
Night	50	25	77	BLACK_TOP	-5	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Night	50	25	77	BLACK_TOP	0	1.55	1.80	1.95	5.6	6.5	7.0	3.5	4.0	4.4
Night	50	25	77	BLACK_TOP	5	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Night	50	25	77	BLACK_TOP	10	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Night	50	25	77	BLACK_TOP	15	0.55	0.75	0.85	2.0	2.7	3.1	1.2	1.7	1.9
Night	50	25	77	BLACK_TOP	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Night	50	25	77	BLACK_TOP	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	50	25	77	BLACK_TOP	40	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	50	25	77	BLACK_TOP	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	50	25	77	DIRT_ROAD	-50	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Night	50	25	77	DIRT_ROAD	-40	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Night	50	25	77	DIRT_ROAD	-30	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Night	50	25	77	DIRT_ROAD	-20	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Night	50	25	77	DIRT_ROAD	-15	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Night	50	25	77	DIRT_ROAD	-10	1.25	1.50	1.65	4.5	5.4	5.9	2.8	3.4	3.7
Night	50	25	77	DIRT_ROAD	-5	1.35	1.60	1.75	4.9	5.8	6.3	3.0	3.6	3.9
Night	50	25	77	DIRT_ROAD	0	1.45	1.70	1.85	5.2	6.1	6.7	3.2	3.8	4.1
Night	50	25	77	DIRT_ROAD	5	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Night	50	25	77	DIRT_ROAD	10	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Night	50	25	77	DIRT_ROAD	15	0.50	0.70	0.80	1.8	2.5	2.9	1.1	1.6	1.8
Night	50	25	77	DIRT_ROAD	20	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Night	50	25	77	DIRT_ROAD	30	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	50	25	77	DIRT_ROAD	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	50	25	77	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	50	25	77	LOOSE_SAND	-50	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Night	50	25	77	LOOSE_SAND	-40	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Night	50	25	77	LOOSE_SAND	-30	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Night	50	25	77	LOOSE_SAND	-20	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Night	50	25	77	LOOSE_SAND	-15	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Night	50	25	77	LOOSE_SAND	-10	0.85	1.00	1.10	3.1	3.6	4.0	1.9	2.2	2.5
Night	50	25	77	LOOSE_SAND	-5	0.95	1.10	1.20	3.4	4.0	4.3	2.1	2.5	2.7
Night	50	25	77	LOOSE_SAND	0	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Night	50	25	77	LOOSE_SAND	5	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Night	50	25	77	LOOSE_SAND	10	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Night	50	25	77	LOOSE_SAND	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	50	25	77	LOOSE_SAND	20	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	50	25	77	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	50	25	77	LOOSE_SAND	40	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Night	50	25	77	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table F-20. Maximum Sustainable Speed, Night, 50% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	50	30	86	BLACK_TOP	-50	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Night	50	30	86	BLACK_TOP	-40	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Night	50	30	86	BLACK_TOP	-30	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Night	50	30	86	BLACK_TOP	-20	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Night	50	30	86	BLACK_TOP	-15	1.10	1.25	1.35	4.0	4.5	4.9	2.5	2.8	3.0
Night	50	30	86	BLACK_TOP	-10	1.20	1.35	1.45	4.3	4.9	5.2	2.7	3.0	3.2
Night	50	30	86	BLACK_TOP	-5	1.30	1.45	1.60	4.7	5.2	5.8	2.9	3.2	3.6
Night	50	30	86	BLACK_TOP	0	1.40	1.55	1.70	5.0	5.6	6.1	3.1	3.5	3.8
Night	50	30	86	BLACK_TOP	5	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Night	50	30	86	BLACK_TOP	10	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Night	50	30	86	BLACK_TOP	15	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	50	30	86	BLACK_TOP	20	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Night	50	30	86	BLACK_TOP	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	50	30	86	BLACK_TOP	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	50	30	86	BLACK_TOP	50	0.15	0.20	0.20	0.5	0.7	0.7	0.3	0.4	0.4
Night	50	30	86	DIRT_ROAD	-50	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Night	50	30	86	DIRT_ROAD	-40	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Night	50	30	86	DIRT_ROAD	-30	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Night	50	30	86	DIRT_ROAD	-20	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Night	50	30	86	DIRT_ROAD	-15	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Night	50	30	86	DIRT_ROAD	-10	1.15	1.25	1.40	4.1	4.5	5.0	2.6	2.8	3.1
Night	50	30	86	DIRT_ROAD	-5	1.25	1.35	1.50	4.5	4.9	5.4	2.8	3.0	3.4
Night	50	30	86	DIRT_ROAD	0	1.35	1.45	1.60	4.9	5.2	5.8	3.0	3.2	3.6
Night	50	30	86	DIRT_ROAD	5	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Night	50	30	86	DIRT_ROAD	10	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Night	50	30	86	DIRT_ROAD	15	0.45	0.55	0.60	1.6	2.0	2.2	1.0	1.2	1.3
Night	50	30	86	DIRT_ROAD	20	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Night	50	30	86	DIRT_ROAD	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	50	30	86	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	50	30	86	DIRT_ROAD	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Night	50	30	86	LOOSE_SAND	-50	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Night	50	30	86	LOOSE_SAND	-40	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Night	50	30	86	LOOSE_SAND	-30	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	50	30	86	LOOSE_SAND	-20	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Night	50	30	86	LOOSE_SAND	-15	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Night	50	30	86	LOOSE_SAND	-10	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Night	50	30	86	LOOSE_SAND	-5	0.85	0.95	1.05	3.1	3.4	3.8	1.9	2.1	2.4
Night	50	30	86	LOOSE_SAND	0	0.95	1.05	1.15	3.4	3.8	4.1	2.1	2.4	2.6
Night	50	30	86	LOOSE_SAND	5	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Night	50	30	86	LOOSE_SAND	10	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Night	50	30	86	LOOSE_SAND	15	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	50	30	86	LOOSE_SAND	20	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Night	50	30	86	LOOSE_SAND	30	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Night	50	30	86	LOOSE_SAND	40	0.10	0.10	0.10	0.4	0.4	0.4	0.2	0.2	0.2
Night	50	30	86	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table F-21. Maximum Sustainable Speed, Night, 50% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	50	35	95	BLACK_TOP	-50	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Night	50	35	95	BLACK_TOP	-40	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Night	50	35	95	BLACK_TOP	-30	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Night	50	35	95	BLACK_TOP	-20	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Night	50	35	95	BLACK_TOP	-15	0.85	0.90	1.05	3.1	3.2	3.8	1.9	2.0	2.4
Night	50	35	95	BLACK_TOP	-10	0.95	1.00	1.15	3.4	3.6	4.1	2.1	2.2	2.6
Night	50	35	95	BLACK_TOP	-5	1.05	1.10	1.25	3.8	4.0	4.5	2.4	2.5	2.8
Night	50	35	95	BLACK_TOP	0	1.15	1.20	1.35	4.1	4.3	4.9	2.6	2.7	3.0
Night	50	35	95	BLACK_TOP	5	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Night	50	35	95	BLACK_TOP	10	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Night	50	35	95	BLACK_TOP	15	0.35	0.35	0.45	1.3	1.3	1.6	0.8	0.8	1.0
Night	50	35	95	BLACK_TOP	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	50	35	95	BLACK_TOP	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	50	35	95	BLACK_TOP	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	50	35	95	BLACK_TOP	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	50	35	95	DIRT_ROAD	-50	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Night	50	35	95	DIRT_ROAD	-40	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	50	35	95	DIRT_ROAD	-30	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Night	50	35	95	DIRT_ROAD	-20	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Night	50	35	95	DIRT_ROAD	-15	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Night	50	35	95	DIRT_ROAD	-10	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Night	50	35	95	DIRT_ROAD	-5	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Night	50	35	95	DIRT_ROAD	0	1.10	1.15	1.30	4.0	4.1	4.7	2.5	2.6	2.9
Night	50	35	95	DIRT_ROAD	5	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Night	50	35	95	DIRT_ROAD	10	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Night	50	35	95	DIRT_ROAD	15	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Night	50	35	95	DIRT_ROAD	20	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	50	35	95	DIRT_ROAD	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Night	50	35	95	DIRT_ROAD	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	50	35	95	DIRT_ROAD	50	0.10	0.10	0.10	0.4	0.4	0.4	0.2	0.2	0.2
Night	50	35	95	LOOSE_SAND	-50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	50	35	95	LOOSE_SAND	-40	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Night	50	35	95	LOOSE_SAND	-30	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Night	50	35	95	LOOSE_SAND	-20	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	50	35	95	LOOSE_SAND	-15	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	50	35	95	LOOSE_SAND	-10	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Night	50	35	95	LOOSE_SAND	-5	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Night	50	35	95	LOOSE_SAND	0	0.80	0.85	0.95	2.9	3.1	3.4	1.8	1.9	2.1
Night	50	35	95	LOOSE_SAND	5	0.40	0.40	0.50	1.4	1.4	1.8	0.9	0.9	1.1
Night	50	35	95	LOOSE_SAND	10	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	50	35	95	LOOSE_SAND	15	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Night	50	35	95	LOOSE_SAND	20	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Night	50	35	95	LOOSE_SAND	30	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Night	50	35	95	LOOSE_SAND	40	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Night	50	35	95	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table F-22. Maximum Sustainable Speed, Night, 75% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	75	5	41	BLACK_TOP	-50	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Night	75	5	41	BLACK_TOP	-40	1.20	1.45	1.75	4.3	5.2	6.3	2.7	3.2	3.9
Night	75	5	41	BLACK_TOP	-30	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Night	75	5	41	BLACK_TOP	-20	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	75	5	41	BLACK_TOP	-15	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	75	5	41	BLACK_TOP	-10	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	75	5	41	BLACK_TOP	-5	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	75	5	41	BLACK_TOP	0	1.90	2.20	2.50	6.8	7.9	9.0	4.3	4.9	5.6
Night	75	5	41	BLACK_TOP	5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	75	5	41	BLACK_TOP	10	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Night	75	5	41	BLACK_TOP	15	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Night	75	5	41	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Night	75	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	75	5	41	BLACK_TOP	40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	75	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	75	5	41	DIRT_ROAD	-50	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	75	5	41	DIRT_ROAD	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Night	75	5	41	DIRT_ROAD	-30	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Night	75	5	41	DIRT_ROAD	-20	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	75	5	41	DIRT_ROAD	-15	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	75	5	41	DIRT_ROAD	-10	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	75	5	41	DIRT_ROAD	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	75	5	41	DIRT_ROAD	0	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	75	5	41	DIRT_ROAD	5	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Night	75	5	41	DIRT_ROAD	10	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	75	5	41	DIRT_ROAD	15	0.75	1.00	1.20	2.7	3.6	4.3	1.7	2.2	2.7
Night	75	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Night	75	5	41	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	75	5	41	DIRT_ROAD	40	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Night	75	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	75	5	41	LOOSE_SAND	-50	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Night	75	5	41	LOOSE_SAND	-40	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Night	75	5	41	LOOSE_SAND	-30	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Night	75	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Night	75	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Night	75	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Night	75	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Night	75	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Night	75	5	41	LOOSE_SAND	5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	75	5	41	LOOSE_SAND	10	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Night	75	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	75	5	41	LOOSE_SAND	20	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Night	75	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	75	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	75	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table F-23. Maximum Sustainable Speed, Night, 75% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	75	10	50	BLACK_TOP	-50	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Night	75	10	50	BLACK_TOP	-40	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Night	75	10	50	BLACK_TOP	-30	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Night	75	10	50	BLACK_TOP	-20	1.45	1.70	2.00	5.2	6.1	7.2	3.2	3.8	4.5
Night	75	10	50	BLACK_TOP	-15	1.50	1.80	2.10	5.4	6.5	7.6	3.4	4.0	4.7
Night	75	10	50	BLACK_TOP	-10	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Night	75	10	50	BLACK_TOP	-5	1.70	2.00	2.35	6.1	7.2	8.5	3.8	4.5	5.3
Night	75	10	50	BLACK_TOP	0	1.85	2.10	2.45	6.7	7.6	8.8	4.1	4.7	5.5
Night	75	10	50	BLACK_TOP	5	1.35	1.60	1.95	4.9	5.8	7.0	3.0	3.6	4.4
Night	75	10	50	BLACK_TOP	10	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Night	75	10	50	BLACK_TOP	15	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Night	75	10	50	BLACK_TOP	20	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Night	75	10	50	BLACK_TOP	30	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Night	75	10	50	BLACK_TOP	40	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	75	10	50	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	75	10	50	DIRT_ROAD	-50	0.95	1.15	1.45	3.4	4.1	5.2	2.1	2.6	3.2
Night	75	10	50	DIRT_ROAD	-40	1.05	1.30	1.55	3.8	4.7	5.6	2.4	2.9	3.5
Night	75	10	50	DIRT_ROAD	-30	1.20	1.40	1.75	4.3	5.0	6.3	2.7	3.1	3.9
Night	75	10	50	DIRT_ROAD	-20	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Night	75	10	50	DIRT_ROAD	-15	1.45	1.70	2.00	5.2	6.1	7.2	3.2	3.8	4.5
Night	75	10	50	DIRT_ROAD	-10	1.55	1.80	2.10	5.6	6.5	7.6	3.5	4.0	4.7
Night	75	10	50	DIRT_ROAD	-5	1.65	1.90	2.20	5.9	6.8	7.9	3.7	4.3	4.9
Night	75	10	50	DIRT_ROAD	0	1.75	2.00	2.35	6.3	7.2	8.5	3.9	4.5	5.3
Night	75	10	50	DIRT_ROAD	5	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Night	75	10	50	DIRT_ROAD	10	0.95	1.15	1.45	3.4	4.1	5.2	2.1	2.6	3.2
Night	75	10	50	DIRT_ROAD	15	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Night	75	10	50	DIRT_ROAD	20	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Night	75	10	50	DIRT_ROAD	30	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Night	75	10	50	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	75	10	50	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Night	75	10	50	LOOSE_SAND	-50	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	75	10	50	LOOSE_SAND	-40	0.65	0.80	1.00	2.3	2.9	3.6	1.5	1.8	2.2
Night	75	10	50	LOOSE_SAND	-30	0.75	0.90	1.10	2.7	3.2	4.0	1.7	2.0	2.5
Night	75	10	50	LOOSE_SAND	-20	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	75	10	50	LOOSE_SAND	-15	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Night	75	10	50	LOOSE_SAND	-10	1.05	1.25	1.45	3.8	4.5	5.2	2.4	2.8	3.2
Night	75	10	50	LOOSE_SAND	-5	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Night	75	10	50	LOOSE_SAND	0	1.25	1.45	1.70	4.5	5.2	6.1	2.8	3.2	3.8
Night	75	10	50	LOOSE_SAND	5	0.80	0.95	1.20	2.9	3.4	4.3	1.8	2.1	2.7
Night	75	10	50	LOOSE_SAND	10	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	75	10	50	LOOSE_SAND	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Night	75	10	50	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	75	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	75	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	75	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table F-24. Maximum Sustainable Speed, Night, 75% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	75	15	59	BLACK_TOP	-50	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Night	75	15	59	BLACK_TOP	-40	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Night	75	15	59	BLACK_TOP	-30	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Night	75	15	59	BLACK_TOP	-20	1.35	1.60	1.85	4.9	5.8	6.7	3.0	3.6	4.1
Night	75	15	59	BLACK_TOP	-15	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Night	75	15	59	BLACK_TOP	-10	1.50	1.80	2.05	5.4	6.5	7.4	3.4	4.0	4.6
Night	75	15	59	BLACK_TOP	-5	1.60	1.90	2.15	5.8	6.8	7.7	3.6	4.3	4.8
Night	75	15	59	BLACK_TOP	0	1.75	2.00	2.25	6.3	7.2	8.1	3.9	4.5	5.0
Night	75	15	59	BLACK_TOP	5	1.25	1.50	1.75	4.5	5.4	6.3	2.8	3.4	3.9
Night	75	15	59	BLACK_TOP	10	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Night	75	15	59	BLACK_TOP	15	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Night	75	15	59	BLACK_TOP	20	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Night	75	15	59	BLACK_TOP	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Night	75	15	59	BLACK_TOP	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	75	15	59	BLACK_TOP	50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Night	75	15	59	DIRT_ROAD	-50	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	75	15	59	DIRT_ROAD	-40	0.95	1.20	1.40	3.4	4.3	5.0	2.1	2.7	3.1
Night	75	15	59	DIRT_ROAD	-30	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Night	75	15	59	DIRT_ROAD	-20	1.25	1.50	1.75	4.5	5.4	6.3	2.8	3.4	3.9
Night	75	15	59	DIRT_ROAD	-15	1.35	1.60	1.80	4.9	5.8	6.5	3.0	3.6	4.0
Night	75	15	59	DIRT_ROAD	-10	1.45	1.70	1.90	5.2	6.1	6.8	3.2	3.8	4.3
Night	75	15	59	DIRT_ROAD	-5	1.55	1.80	2.05	5.6	6.5	7.4	3.5	4.0	4.6
Night	75	15	59	DIRT_ROAD	0	1.65	1.90	2.15	5.9	6.8	7.7	3.7	4.3	4.8
Night	75	15	59	DIRT_ROAD	5	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Night	75	15	59	DIRT_ROAD	10	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	75	15	59	DIRT_ROAD	15	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Night	75	15	59	DIRT_ROAD	20	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Night	75	15	59	DIRT_ROAD	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	75	15	59	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	75	15	59	DIRT_ROAD	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	75	15	59	LOOSE_SAND	-50	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Night	75	15	59	LOOSE_SAND	-40	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	75	15	59	LOOSE_SAND	-30	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Night	75	15	59	LOOSE_SAND	-20	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Night	75	15	59	LOOSE_SAND	-15	0.90	1.05	1.25	3.2	3.8	4.5	2.0	2.4	2.8
Night	75	15	59	LOOSE_SAND	-10	1.00	1.15	1.35	3.6	4.1	4.9	2.2	2.6	3.0
Night	75	15	59	LOOSE_SAND	-5	1.10	1.25	1.45	4.0	4.5	5.2	2.5	2.8	3.2
Night	75	15	59	LOOSE_SAND	0	1.20	1.35	1.55	4.3	4.9	5.6	2.7	3.0	3.5
Night	75	15	59	LOOSE_SAND	5	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Night	75	15	59	LOOSE_SAND	10	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Night	75	15	59	LOOSE_SAND	15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	75	15	59	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	75	15	59	LOOSE_SAND	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	75	15	59	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	75	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table F-25. Maximum Sustainable Speed, Night, 75% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	75	20	68	BLACK_TOP	-50	0.85	1.05	1.15	3.1	3.8	4.1	1.9	2.4	2.6
Night	75	20	68	BLACK_TOP	-40	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Night	75	20	68	BLACK_TOP	-30	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Night	75	20	68	BLACK_TOP	-20	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Night	75	20	68	BLACK_TOP	-15	1.30	1.55	1.70	4.7	5.6	6.1	2.9	3.5	3.8
Night	75	20	68	BLACK_TOP	-10	1.40	1.65	1.80	5.0	5.9	6.5	3.1	3.7	4.0
Night	75	20	68	BLACK_TOP	-5	1.50	1.75	1.90	5.4	6.3	6.8	3.4	3.9	4.3
Night	75	20	68	BLACK_TOP	0	1.60	1.85	2.05	5.8	6.7	7.4	3.6	4.1	4.6
Night	75	20	68	BLACK_TOP	5	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Night	75	20	68	BLACK_TOP	10	0.85	1.05	1.15	3.1	3.8	4.1	1.9	2.4	2.6
Night	75	20	68	BLACK_TOP	15	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Night	75	20	68	BLACK_TOP	20	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Night	75	20	68	BLACK_TOP	30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	75	20	68	BLACK_TOP	40	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Night	75	20	68	BLACK_TOP	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	75	20	68	DIRT_ROAD	-50	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Night	75	20	68	DIRT_ROAD	-40	0.85	1.10	1.20	3.1	4.0	4.3	1.9	2.5	2.7
Night	75	20	68	DIRT_ROAD	-30	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Night	75	20	68	DIRT_ROAD	-20	1.15	1.35	1.50	4.1	4.9	5.4	2.6	3.0	3.4
Night	75	20	68	DIRT_ROAD	-15	1.25	1.45	1.60	4.5	5.2	5.8	2.8	3.2	3.6
Night	75	20	68	DIRT_ROAD	-10	1.35	1.55	1.70	4.9	5.6	6.1	3.0	3.5	3.8
Night	75	20	68	DIRT_ROAD	-5	1.45	1.65	1.80	5.2	5.9	6.5	3.2	3.7	4.0
Night	75	20	68	DIRT_ROAD	0	1.55	1.80	1.95	5.6	6.5	7.0	3.5	4.0	4.4
Night	75	20	68	DIRT_ROAD	5	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Night	75	20	68	DIRT_ROAD	10	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Night	75	20	68	DIRT_ROAD	15	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Night	75	20	68	DIRT_ROAD	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Night	75	20	68	DIRT_ROAD	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	75	20	68	DIRT_ROAD	40	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	75	20	68	DIRT_ROAD	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	75	20	68	LOOSE_SAND	-50	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Night	75	20	68	LOOSE_SAND	-40	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Night	75	20	68	LOOSE_SAND	-30	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Night	75	20	68	LOOSE_SAND	-20	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Night	75	20	68	LOOSE_SAND	-15	0.80	1.00	1.10	2.9	3.6	4.0	1.8	2.2	2.5
Night	75	20	68	LOOSE_SAND	-10	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Night	75	20	68	LOOSE_SAND	-5	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Night	75	20	68	LOOSE_SAND	0	1.10	1.30	1.40	4.0	4.7	5.0	2.5	2.9	3.1
Night	75	20	68	LOOSE_SAND	5	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Night	75	20	68	LOOSE_SAND	10	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Night	75	20	68	LOOSE_SAND	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	75	20	68	LOOSE_SAND	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	75	20	68	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	75	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	75	20	68	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table F-26. Maximum Sustainable Speed, Night, 75 % Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	75	25	77	BLACK_TOP	-50	0.75	0.80	0.95	2.7	2.9	3.4	1.7	1.8	2.1
Night	75	25	77	BLACK_TOP	-40	0.85	0.95	1.05	3.1	3.4	3.8	1.9	2.1	2.4
Night	75	25	77	BLACK_TOP	-30	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Night	75	25	77	BLACK_TOP	-20	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Night	75	25	77	BLACK_TOP	-15	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Night	75	25	77	BLACK_TOP	-10	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Night	75	25	77	BLACK_TOP	-5	1.40	1.50	1.65	5.0	5.4	5.9	3.1	3.4	3.7
Night	75	25	77	BLACK_TOP	0	1.50	1.60	1.75	5.4	5.8	6.3	3.4	3.6	3.9
Night	75	25	77	BLACK_TOP	5	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Night	75	25	77	BLACK_TOP	10	0.75	0.80	0.95	2.7	2.9	3.4	1.7	1.8	2.1
Night	75	25	77	BLACK_TOP	15	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Night	75	25	77	BLACK_TOP	20	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	75	25	77	BLACK_TOP	30	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Night	75	25	77	BLACK_TOP	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	75	25	77	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	75	25	77	DIRT_ROAD	-50	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Night	75	25	77	DIRT_ROAD	-40	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Night	75	25	77	DIRT_ROAD	-30	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Night	75	25	77	DIRT_ROAD	-20	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Night	75	25	77	DIRT_ROAD	-15	1.15	1.25	1.35	4.1	4.5	4.9	2.6	2.8	3.0
Night	75	25	77	DIRT_ROAD	-10	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Night	75	25	77	DIRT_ROAD	-5	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Night	75	25	77	DIRT_ROAD	0	1.45	1.55	1.70	5.2	5.6	6.1	3.2	3.5	3.8
Night	75	25	77	DIRT_ROAD	5	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Night	75	25	77	DIRT_ROAD	10	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Night	75	25	77	DIRT_ROAD	15	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	75	25	77	DIRT_ROAD	20	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Night	75	25	77	DIRT_ROAD	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	75	25	77	DIRT_ROAD	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	75	25	77	DIRT_ROAD	50	0.15	0.20	0.20	0.5	0.7	0.7	0.3	0.4	0.4
Night	75	25	77	LOOSE_SAND	-50	0.40	0.45	0.50	1.4	1.6	1.8	0.9	1.0	1.1
Night	75	25	77	LOOSE_SAND	-40	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	75	25	77	LOOSE_SAND	-30	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Night	75	25	77	LOOSE_SAND	-20	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Night	75	25	77	LOOSE_SAND	-15	0.75	0.80	0.90	2.7	2.9	3.2	1.7	1.8	2.0
Night	75	25	77	LOOSE_SAND	-10	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Night	75	25	77	LOOSE_SAND	-5	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Night	75	25	77	LOOSE_SAND	0	1.05	1.10	1.20	3.8	4.0	4.3	2.4	2.5	2.7
Night	75	25	77	LOOSE_SAND	5	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Night	75	25	77	LOOSE_SAND	10	0.40	0.45	0.50	1.4	1.6	1.8	0.9	1.0	1.1
Night	75	25	77	LOOSE_SAND	15	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	75	25	77	LOOSE_SAND	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	75	25	77	LOOSE_SAND	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Night	75	25	77	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	75	25	77	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table F-27. Maximum Sustainable Speed, Night, 75% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	75	30	86	BLACK_TOP	-50	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	75	30	86	BLACK_TOP	-40	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Night	75	30	86	BLACK_TOP	-30	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Night	75	30	86	BLACK_TOP	-20	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Night	75	30	86	BLACK_TOP	-15	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Night	75	30	86	BLACK_TOP	-10	1.00	1.05	1.20	3.6	3.8	4.3	2.2	2.4	2.7
Night	75	30	86	BLACK_TOP	-5	1.10	1.15	1.30	4.0	4.1	4.7	2.5	2.6	2.9
Night	75	30	86	BLACK_TOP	0	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Night	75	30	86	BLACK_TOP	5	0.75	0.80	0.95	2.7	2.9	3.4	1.7	1.8	2.1
Night	75	30	86	BLACK_TOP	10	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	75	30	86	BLACK_TOP	15	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Night	75	30	86	BLACK_TOP	20	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Night	75	30	86	BLACK_TOP	30	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Night	75	30	86	BLACK_TOP	40	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Night	75	30	86	BLACK_TOP	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	75	30	86	DIRT_ROAD	-50	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	75	30	86	DIRT_ROAD	-40	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Night	75	30	86	DIRT_ROAD	-30	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Night	75	30	86	DIRT_ROAD	-20	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Night	75	30	86	DIRT_ROAD	-15	0.85	0.90	1.05	3.1	3.2	3.8	1.9	2.0	2.4
Night	75	30	86	DIRT_ROAD	-10	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Night	75	30	86	DIRT_ROAD	-5	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Night	75	30	86	DIRT_ROAD	0	1.15	1.20	1.35	4.1	4.3	4.9	2.6	2.7	3.0
Night	75	30	86	DIRT_ROAD	5	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Night	75	30	86	DIRT_ROAD	10	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	75	30	86	DIRT_ROAD	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	75	30	86	DIRT_ROAD	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	75	30	86	DIRT_ROAD	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	75	30	86	DIRT_ROAD	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	75	30	86	DIRT_ROAD	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	75	30	86	LOOSE_SAND	-50	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	75	30	86	LOOSE_SAND	-40	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Night	75	30	86	LOOSE_SAND	-30	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Night	75	30	86	LOOSE_SAND	-20	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	75	30	86	LOOSE_SAND	-15	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Night	75	30	86	LOOSE_SAND	-10	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Night	75	30	86	LOOSE_SAND	-5	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Night	75	30	86	LOOSE_SAND	0	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Night	75	30	86	LOOSE_SAND	5	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Night	75	30	86	LOOSE_SAND	10	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	75	30	86	LOOSE_SAND	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	75	30	86	LOOSE_SAND	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	75	30	86	LOOSE_SAND	30	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Night	75	30	86	LOOSE_SAND	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Night	75	30	86	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table F-28. Maximum Sustainable Speed, Night, 75% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	75	35	95	BLACK_TOP	-50	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Night	75	35	95	BLACK_TOP	-40	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Night	75	35	95	BLACK_TOP	-30	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	75	35	95	BLACK_TOP	-20	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	75	35	95	BLACK_TOP	-15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Night	75	35	95	BLACK_TOP	-10	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Night	75	35	95	BLACK_TOP	-5	0.55	0.65	0.85	2.0	2.3	3.1	1.2	1.5	1.9
Night	75	35	95	BLACK_TOP	0	0.65	0.75	0.95	2.3	2.7	3.4	1.5	1.7	2.1
Night	75	35	95	BLACK_TOP	5	0.30	0.35	0.55	1.1	1.3	2.0	0.7	0.8	1.2
Night	75	35	95	BLACK_TOP	10	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Night	75	35	95	BLACK_TOP	15	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Night	75	35	95	BLACK_TOP	20	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Night	75	35	95	BLACK_TOP	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Night	75	35	95	BLACK_TOP	40	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Night	75	35	95	BLACK_TOP	50	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Night	75	35	95	DIRT_ROAD	-50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	75	35	95	DIRT_ROAD	-40	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	75	35	95	DIRT_ROAD	-30	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Night	75	35	95	DIRT_ROAD	-20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Night	75	35	95	DIRT_ROAD	-15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Night	75	35	95	DIRT_ROAD	-10	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Night	75	35	95	DIRT_ROAD	-5	0.50	0.60	0.80	1.8	2.2	2.9	1.1	1.3	1.8
Night	75	35	95	DIRT_ROAD	0	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Night	75	35	95	DIRT_ROAD	5	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Night	75	35	95	DIRT_ROAD	10	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	75	35	95	DIRT_ROAD	15	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	75	35	95	DIRT_ROAD	20	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Night	75	35	95	DIRT_ROAD	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Night	75	35	95	DIRT_ROAD	40	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Night	75	35	95	DIRT_ROAD	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	75	35	95	LOOSE_SAND	-50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Night	75	35	95	LOOSE_SAND	-40	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Night	75	35	95	LOOSE_SAND	-30	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Night	75	35	95	LOOSE_SAND	-20	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Night	75	35	95	LOOSE_SAND	-15	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Night	75	35	95	LOOSE_SAND	-10	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	75	35	95	LOOSE_SAND	-5	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Night	75	35	95	LOOSE_SAND	0	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Night	75	35	95	LOOSE_SAND	5	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	75	35	95	LOOSE_SAND	10	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Night	75	35	95	LOOSE_SAND	15	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Night	75	35	95	LOOSE_SAND	20	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Night	75	35	95	LOOSE_SAND	30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	75	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	75	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table F-29. Maximum Sustainable Speed, Night, 95% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	95	5	41	BLACK_TOP	-50	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Night	95	5	41	BLACK_TOP	-40	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Night	95	5	41	BLACK_TOP	-30	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Night	95	5	41	BLACK_TOP	-20	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Night	95	5	41	BLACK_TOP	-15	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Night	95	5	41	BLACK_TOP	-10	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Night	95	5	41	BLACK_TOP	-5	1.75	2.10	2.40	6.3	7.6	8.6	3.9	4.7	5.4
Night	95	5	41	BLACK_TOP	0	1.90	2.20	2.50	6.8	7.9	9.0	4.3	4.9	5.6
Night	95	5	41	BLACK_TOP	5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Night	95	5	41	BLACK_TOP	10	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Night	95	5	41	BLACK_TOP	15	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Night	95	5	41	BLACK_TOP	20	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Night	95	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Night	95	5	41	BLACK_TOP	40	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Night	95	5	41	BLACK_TOP	50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	95	5	41	DIRT_ROAD	-50	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	95	5	41	DIRT_ROAD	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Night	95	5	41	DIRT_ROAD	-30	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Night	95	5	41	DIRT_ROAD	-20	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Night	95	5	41	DIRT_ROAD	-15	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Night	95	5	41	DIRT_ROAD	-10	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Night	95	5	41	DIRT_ROAD	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	95	5	41	DIRT_ROAD	0	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	95	5	41	DIRT_ROAD	5	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Night	95	5	41	DIRT_ROAD	10	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Night	95	5	41	DIRT_ROAD	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Night	95	5	41	DIRT_ROAD	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Night	95	5	41	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Night	95	5	41	DIRT_ROAD	40	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Night	95	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	95	5	41	LOOSE_SAND	-50	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Night	95	5	41	LOOSE_SAND	-40	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Night	95	5	41	LOOSE_SAND	-30	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Night	95	5	41	LOOSE_SAND	-20	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Night	95	5	41	LOOSE_SAND	-15	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Night	95	5	41	LOOSE_SAND	-10	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Night	95	5	41	LOOSE_SAND	-5	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Night	95	5	41	LOOSE_SAND	0	1.30	1.50	1.75	4.7	5.4	6.3	2.9	3.4	3.9
Night	95	5	41	LOOSE_SAND	5	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	95	5	41	LOOSE_SAND	10	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Night	95	5	41	LOOSE_SAND	15	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Night	95	5	41	LOOSE_SAND	20	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Night	95	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Night	95	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	95	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table F-30. Maximum Sustainable Speed, Night, 95% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	95	10	50	BLACK_TOP	-50	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	95	10	50	BLACK_TOP	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Night	95	10	50	BLACK_TOP	-30	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Night	95	10	50	BLACK_TOP	-20	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Night	95	10	50	BLACK_TOP	-15	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Night	95	10	50	BLACK_TOP	-10	1.60	1.85	2.15	5.8	6.7	7.7	3.6	4.1	4.8
Night	95	10	50	BLACK_TOP	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Night	95	10	50	BLACK_TOP	0	1.80	2.10	2.40	6.5	7.6	8.6	4.0	4.7	5.4
Night	95	10	50	BLACK_TOP	5	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Night	95	10	50	BLACK_TOP	10	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Night	95	10	50	BLACK_TOP	15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Night	95	10	50	BLACK_TOP	20	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Night	95	10	50	BLACK_TOP	30	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Night	95	10	50	BLACK_TOP	40	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	95	10	50	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	95	10	50	DIRT_ROAD	-50	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Night	95	10	50	DIRT_ROAD	-40	1.05	1.25	1.55	3.8	4.5	5.6	2.4	2.8	3.5
Night	95	10	50	DIRT_ROAD	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Night	95	10	50	DIRT_ROAD	-20	1.35	1.60	1.85	4.9	5.8	6.7	3.0	3.6	4.1
Night	95	10	50	DIRT_ROAD	-15	1.40	1.65	1.95	5.0	5.9	7.0	3.1	3.7	4.4
Night	95	10	50	DIRT_ROAD	-10	1.50	1.75	2.05	5.4	6.3	7.4	3.4	3.9	4.6
Night	95	10	50	DIRT_ROAD	-5	1.60	1.90	2.15	5.8	6.8	7.7	3.6	4.3	4.8
Night	95	10	50	DIRT_ROAD	0	1.75	2.00	2.30	6.3	7.2	8.3	3.9	4.5	5.2
Night	95	10	50	DIRT_ROAD	5	1.25	1.50	1.75	4.5	5.4	6.3	2.8	3.4	3.9
Night	95	10	50	DIRT_ROAD	10	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Night	95	10	50	DIRT_ROAD	15	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Night	95	10	50	DIRT_ROAD	20	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Night	95	10	50	DIRT_ROAD	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Night	95	10	50	DIRT_ROAD	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	95	10	50	DIRT_ROAD	50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Night	95	10	50	LOOSE_SAND	-50	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	95	10	50	LOOSE_SAND	-40	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Night	95	10	50	LOOSE_SAND	-30	0.75	0.90	1.10	2.7	3.2	4.0	1.7	2.0	2.5
Night	95	10	50	LOOSE_SAND	-20	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Night	95	10	50	LOOSE_SAND	-15	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Night	95	10	50	LOOSE_SAND	-10	1.05	1.20	1.45	3.8	4.3	5.2	2.4	2.7	3.2
Night	95	10	50	LOOSE_SAND	-5	1.15	1.30	1.55	4.1	4.7	5.6	2.6	2.9	3.5
Night	95	10	50	LOOSE_SAND	0	1.25	1.45	1.65	4.5	5.2	5.9	2.8	3.2	3.7
Night	95	10	50	LOOSE_SAND	5	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Night	95	10	50	LOOSE_SAND	10	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	95	10	50	LOOSE_SAND	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Night	95	10	50	LOOSE_SAND	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Night	95	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	95	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	95	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table F-31. Maximum Sustainable Speed, Night, 95% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	95	15	59	BLACK_TOP	-50	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Night	95	15	59	BLACK_TOP	-40	1.00	1.25	1.45	3.6	4.5	5.2	2.2	2.8	3.2
Night	95	15	59	BLACK_TOP	-30	1.15	1.40	1.60	4.1	5.0	5.8	2.6	3.1	3.6
Night	95	15	59	BLACK_TOP	-20	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Night	95	15	59	BLACK_TOP	-15	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Night	95	15	59	BLACK_TOP	-10	1.50	1.75	1.95	5.4	6.3	7.0	3.4	3.9	4.4
Night	95	15	59	BLACK_TOP	-5	1.60	1.85	2.05	5.8	6.7	7.4	3.6	4.1	4.6
Night	95	15	59	BLACK_TOP	0	1.70	2.00	2.20	6.1	7.2	7.9	3.8	4.5	4.9
Night	95	15	59	BLACK_TOP	5	1.25	1.50	1.65	4.5	5.4	5.9	2.8	3.4	3.7
Night	95	15	59	BLACK_TOP	10	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Night	95	15	59	BLACK_TOP	15	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Night	95	15	59	BLACK_TOP	20	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	95	15	59	BLACK_TOP	30	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Night	95	15	59	BLACK_TOP	40	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Night	95	15	59	BLACK_TOP	50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Night	95	15	59	DIRT_ROAD	-50	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Night	95	15	59	DIRT_ROAD	-40	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Night	95	15	59	DIRT_ROAD	-30	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Night	95	15	59	DIRT_ROAD	-20	1.25	1.50	1.65	4.5	5.4	5.9	2.8	3.4	3.7
Night	95	15	59	DIRT_ROAD	-15	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Night	95	15	59	DIRT_ROAD	-10	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Night	95	15	59	DIRT_ROAD	-5	1.50	1.75	1.95	5.4	6.3	7.0	3.4	3.9	4.4
Night	95	15	59	DIRT_ROAD	0	1.65	1.90	2.10	5.9	6.8	7.6	3.7	4.3	4.7
Night	95	15	59	DIRT_ROAD	5	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Night	95	15	59	DIRT_ROAD	10	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Night	95	15	59	DIRT_ROAD	15	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Night	95	15	59	DIRT_ROAD	20	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Night	95	15	59	DIRT_ROAD	30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	95	15	59	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	95	15	59	DIRT_ROAD	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Night	95	15	59	LOOSE_SAND	-50	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Night	95	15	59	LOOSE_SAND	-40	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Night	95	15	59	LOOSE_SAND	-30	0.65	0.85	0.95	2.3	3.1	3.4	1.5	1.9	2.1
Night	95	15	59	LOOSE_SAND	-20	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Night	95	15	59	LOOSE_SAND	-15	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Night	95	15	59	LOOSE_SAND	-10	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Night	95	15	59	LOOSE_SAND	-5	1.05	1.25	1.40	3.8	4.5	5.0	2.4	2.8	3.1
Night	95	15	59	LOOSE_SAND	0	1.20	1.35	1.50	4.3	4.9	5.4	2.7	3.0	3.4
Night	95	15	59	LOOSE_SAND	5	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Night	95	15	59	LOOSE_SAND	10	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Night	95	15	59	LOOSE_SAND	15	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Night	95	15	59	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Night	95	15	59	LOOSE_SAND	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	95	15	59	LOOSE_SAND	40	0.15	0.20	0.20	0.5	0.7	0.7	0.3	0.4	0.4
Night	95	15	59	LOOSE_SAND	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3

Table F-32. Maximum Sustainable Speed, Night, 95% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	95	20	68	BLACK_TOP	-50	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Night	95	20	68	BLACK_TOP	-40	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Night	95	20	68	BLACK_TOP	-30	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Night	95	20	68	BLACK_TOP	-20	1.20	1.35	1.50	4.3	4.9	5.4	2.7	3.0	3.4
Night	95	20	68	BLACK_TOP	-15	1.30	1.45	1.60	4.7	5.2	5.8	2.9	3.2	3.6
Night	95	20	68	BLACK_TOP	-10	1.40	1.55	1.70	5.0	5.6	6.1	3.1	3.5	3.8
Night	95	20	68	BLACK_TOP	-5	1.50	1.65	1.80	5.4	5.9	6.5	3.4	3.7	4.0
Night	95	20	68	BLACK_TOP	0	1.60	1.80	1.95	5.8	6.5	7.0	3.6	4.0	4.4
Night	95	20	68	BLACK_TOP	5	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Night	95	20	68	BLACK_TOP	10	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Night	95	20	68	BLACK_TOP	15	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Night	95	20	68	BLACK_TOP	20	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Night	95	20	68	BLACK_TOP	30	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Night	95	20	68	BLACK_TOP	40	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	95	20	68	BLACK_TOP	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	95	20	68	DIRT_ROAD	-50	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Night	95	20	68	DIRT_ROAD	-40	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Night	95	20	68	DIRT_ROAD	-30	1.00	1.15	1.25	3.6	4.1	4.5	2.2	2.6	2.8
Night	95	20	68	DIRT_ROAD	-20	1.15	1.30	1.45	4.1	4.7	5.2	2.6	2.9	3.2
Night	95	20	68	DIRT_ROAD	-15	1.20	1.40	1.50	4.3	5.0	5.4	2.7	3.1	3.4
Night	95	20	68	DIRT_ROAD	-10	1.30	1.50	1.60	4.7	5.4	5.8	2.9	3.4	3.6
Night	95	20	68	DIRT_ROAD	-5	1.40	1.60	1.70	5.0	5.8	6.1	3.1	3.6	3.8
Night	95	20	68	DIRT_ROAD	0	1.55	1.70	1.85	5.6	6.1	6.7	3.5	3.8	4.1
Night	95	20	68	DIRT_ROAD	5	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Night	95	20	68	DIRT_ROAD	10	0.75	0.90	1.00	2.7	3.2	3.6	1.7	2.0	2.2
Night	95	20	68	DIRT_ROAD	15	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Night	95	20	68	DIRT_ROAD	20	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Night	95	20	68	DIRT_ROAD	30	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	95	20	68	DIRT_ROAD	40	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	95	20	68	DIRT_ROAD	50	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Night	95	20	68	LOOSE_SAND	-50	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	95	20	68	LOOSE_SAND	-40	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Night	95	20	68	LOOSE_SAND	-30	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Night	95	20	68	LOOSE_SAND	-20	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Night	95	20	68	LOOSE_SAND	-15	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Night	95	20	68	LOOSE_SAND	-10	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Night	95	20	68	LOOSE_SAND	-5	1.00	1.10	1.20	3.6	4.0	4.3	2.2	2.5	2.7
Night	95	20	68	LOOSE_SAND	0	1.10	1.20	1.30	4.0	4.3	4.7	2.5	2.7	2.9
Night	95	20	68	LOOSE_SAND	5	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Night	95	20	68	LOOSE_SAND	10	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	95	20	68	LOOSE_SAND	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	95	20	68	LOOSE_SAND	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	95	20	68	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	95	20	68	LOOSE_SAND	40	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Night	95	20	68	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table F-33. Maximum Sustainable Speed, Night, 95% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	95	25	77	BLACK_TOP	-50	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Night	95	25	77	BLACK_TOP	-40	0.75	0.80	0.95	2.7	2.9	3.4	1.7	1.8	2.1
Night	95	25	77	BLACK_TOP	-30	0.85	0.90	1.05	3.1	3.2	3.8	1.9	2.0	2.4
Night	95	25	77	BLACK_TOP	-20	1.00	1.05	1.20	3.6	3.8	4.3	2.2	2.4	2.7
Night	95	25	77	BLACK_TOP	-15	1.05	1.15	1.30	3.8	4.1	4.7	2.4	2.6	2.9
Night	95	25	77	BLACK_TOP	-10	1.15	1.25	1.40	4.1	4.5	5.0	2.6	2.8	3.1
Night	95	25	77	BLACK_TOP	-5	1.25	1.35	1.50	4.5	4.9	5.4	2.8	3.0	3.4
Night	95	25	77	BLACK_TOP	0	1.40	1.45	1.60	5.0	5.2	5.8	3.1	3.2	3.6
Night	95	25	77	BLACK_TOP	5	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Night	95	25	77	BLACK_TOP	10	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Night	95	25	77	BLACK_TOP	15	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Night	95	25	77	BLACK_TOP	20	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Night	95	25	77	BLACK_TOP	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	95	25	77	BLACK_TOP	40	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Night	95	25	77	BLACK_TOP	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Night	95	25	77	DIRT_ROAD	-50	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Night	95	25	77	DIRT_ROAD	-40	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Night	95	25	77	DIRT_ROAD	-30	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Night	95	25	77	DIRT_ROAD	-20	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Night	95	25	77	DIRT_ROAD	-15	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Night	95	25	77	DIRT_ROAD	-10	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Night	95	25	77	DIRT_ROAD	-5	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Night	95	25	77	DIRT_ROAD	0	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Night	95	25	77	DIRT_ROAD	5	0.85	0.95	1.05	3.1	3.4	3.8	1.9	2.1	2.4
Night	95	25	77	DIRT_ROAD	10	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Night	95	25	77	DIRT_ROAD	15	0.45	0.50	0.55	1.6	1.8	2.0	1.0	1.1	1.2
Night	95	25	77	DIRT_ROAD	20	0.35	0.35	0.45	1.3	1.3	1.6	0.8	0.8	1.0
Night	95	25	77	DIRT_ROAD	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	95	25	77	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	95	25	77	DIRT_ROAD	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Night	95	25	77	LOOSE_SAND	-50	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	95	25	77	LOOSE_SAND	-40	0.40	0.45	0.50	1.4	1.6	1.8	0.9	1.0	1.1
Night	95	25	77	LOOSE_SAND	-30	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	95	25	77	LOOSE_SAND	-20	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Night	95	25	77	LOOSE_SAND	-15	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Night	95	25	77	LOOSE_SAND	-10	0.75	0.80	0.90	2.7	2.9	3.2	1.7	1.8	2.0
Night	95	25	77	LOOSE_SAND	-5	0.85	0.90	1.00	3.1	3.2	3.6	1.9	2.0	2.2
Night	95	25	77	LOOSE_SAND	0	0.95	1.00	1.10	3.4	3.6	4.0	2.1	2.2	2.5
Night	95	25	77	LOOSE_SAND	5	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Night	95	25	77	LOOSE_SAND	10	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	95	25	77	LOOSE_SAND	15	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	95	25	77	LOOSE_SAND	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	95	25	77	LOOSE_SAND	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	95	25	77	LOOSE_SAND	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Night	95	25	77	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table F-34. Maximum Sustainable Speed, Night, 95% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	95	30	86	BLACK_TOP	-50	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Night	95	30	86	BLACK_TOP	-40	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Night	95	30	86	BLACK_TOP	-30	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Night	95	30	86	BLACK_TOP	-20	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Night	95	30	86	BLACK_TOP	-15	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Night	95	30	86	BLACK_TOP	-10	0.75	0.80	1.00	2.7	2.9	3.6	1.7	1.8	2.2
Night	95	30	86	BLACK_TOP	-5	0.85	0.90	1.10	3.1	3.2	4.0	1.9	2.0	2.5
Night	95	30	86	BLACK_TOP	0	0.95	1.05	1.20	3.4	3.8	4.3	2.1	2.4	2.7
Night	95	30	86	BLACK_TOP	5	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Night	95	30	86	BLACK_TOP	10	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Night	95	30	86	BLACK_TOP	15	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Night	95	30	86	BLACK_TOP	20	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Night	95	30	86	BLACK_TOP	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Night	95	30	86	BLACK_TOP	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	95	30	86	BLACK_TOP	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Night	95	30	86	DIRT_ROAD	-50	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	95	30	86	DIRT_ROAD	-40	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Night	95	30	86	DIRT_ROAD	-30	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Night	95	30	86	DIRT_ROAD	-20	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Night	95	30	86	DIRT_ROAD	-15	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Night	95	30	86	DIRT_ROAD	-10	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Night	95	30	86	DIRT_ROAD	-5	0.80	0.85	1.05	2.9	3.1	3.8	1.8	1.9	2.4
Night	95	30	86	DIRT_ROAD	0	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Night	95	30	86	DIRT_ROAD	5	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Night	95	30	86	DIRT_ROAD	10	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Night	95	30	86	DIRT_ROAD	15	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Night	95	30	86	DIRT_ROAD	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	95	30	86	DIRT_ROAD	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	95	30	86	DIRT_ROAD	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Night	95	30	86	DIRT_ROAD	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Night	95	30	86	LOOSE_SAND	-50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	95	30	86	LOOSE_SAND	-40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Night	95	30	86	LOOSE_SAND	-30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Night	95	30	86	LOOSE_SAND	-20	0.35	0.35	0.45	1.3	1.3	1.6	0.8	0.8	1.0
Night	95	30	86	LOOSE_SAND	-15	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Night	95	30	86	LOOSE_SAND	-10	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Night	95	30	86	LOOSE_SAND	-5	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Night	95	30	86	LOOSE_SAND	0	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Night	95	30	86	LOOSE_SAND	5	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Night	95	30	86	LOOSE_SAND	10	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Night	95	30	86	LOOSE_SAND	15	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Night	95	30	86	LOOSE_SAND	20	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Night	95	30	86	LOOSE_SAND	30	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Night	95	30	86	LOOSE_SAND	40	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Night	95	30	86	LOOSE_SAND	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1

Table F-35. Maximum Sustainable Speed, Night, 95% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Night	95	35	95	BLACK_TOP	-50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	BLACK_TOP	-40	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Night	95	35	95	BLACK_TOP	-30	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Night	95	35	95	BLACK_TOP	-20	0.00	0.00	0.20	0.0	0.0	0.7	0.0	0.0	0.4
Night	95	35	95	BLACK_TOP	-15	0.00	0.00	0.20	0.0	0.0	0.7	0.0	0.0	0.4
Night	95	35	95	BLACK_TOP	-10	0.00	0.00	0.30	0.0	0.0	1.1	0.0	0.0	0.7
Night	95	35	95	BLACK_TOP	-5	0.00	0.00	0.35	0.0	0.0	1.3	0.0	0.0	0.8
Night	95	35	95	BLACK_TOP	0	0.00	0.00	0.45	0.0	0.0	1.6	0.0	0.0	1.0
Night	95	35	95	BLACK_TOP	5	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Night	95	35	95	BLACK_TOP	10	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	BLACK_TOP	15	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	BLACK_TOP	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	BLACK_TOP	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	BLACK_TOP	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	BLACK_TOP	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	DIRT_ROAD	-50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	DIRT_ROAD	-40	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Night	95	35	95	DIRT_ROAD	-30	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Night	95	35	95	DIRT_ROAD	-20	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Night	95	35	95	DIRT_ROAD	-15	0.00	0.00	0.20	0.0	0.0	0.7	0.0	0.0	0.4
Night	95	35	95	DIRT_ROAD	-10	0.00	0.00	0.25	0.0	0.0	0.9	0.0	0.0	0.6
Night	95	35	95	DIRT_ROAD	-5	0.00	0.00	0.35	0.0	0.0	1.3	0.0	0.0	0.8
Night	95	35	95	DIRT_ROAD	0	0.00	0.00	0.45	0.0	0.0	1.6	0.0	0.0	1.0
Night	95	35	95	DIRT_ROAD	5	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Night	95	35	95	DIRT_ROAD	10	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	DIRT_ROAD	15	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	DIRT_ROAD	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	DIRT_ROAD	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	DIRT_ROAD	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	DIRT_ROAD	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	LOOSE_SAND	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	LOOSE_SAND	-40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	LOOSE_SAND	-30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	LOOSE_SAND	-20	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Night	95	35	95	LOOSE_SAND	-15	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Night	95	35	95	LOOSE_SAND	-10	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Night	95	35	95	LOOSE_SAND	-5	0.00	0.00	0.20	0.0	0.0	0.7	0.0	0.0	0.4
Night	95	35	95	LOOSE_SAND	0	0.00	0.00	0.30	0.0	0.0	1.1	0.0	0.0	0.7
Night	95	35	95	LOOSE_SAND	5	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Night	95	35	95	LOOSE_SAND	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	LOOSE_SAND	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	LOOSE_SAND	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Night	95	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Appendix G

Maximum Sustainable Speed Tables, Partly Cloudy

Table G-1. Maximum Sustainable Speed, Partly Cloudy, 5% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	5	5	41	BLACK_TOP	-50	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	5	5	41	BLACK_TOP	-40	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Partly_Cloudy	5	5	41	BLACK_TOP	-30	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Partly_Cloudy	5	5	41	BLACK_TOP	-20	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	5	5	41	BLACK_TOP	-15	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Partly_Cloudy	5	5	41	BLACK_TOP	-10	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Partly_Cloudy	5	5	41	BLACK_TOP	-5	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Partly_Cloudy	5	5	41	BLACK_TOP	0	1.85	2.15	2.50	6.7	7.7	9.0	4.1	4.8	5.6
Partly_Cloudy	5	5	41	BLACK_TOP	5	1.35	1.65	2.00	4.9	5.9	7.2	3.0	3.7	4.5
Partly_Cloudy	5	5	41	BLACK_TOP	10	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	5	5	41	BLACK_TOP	15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Partly_Cloudy	5	5	41	BLACK_TOP	20	0.65	0.80	1.10	2.3	2.9	4.0	1.5	1.8	2.5
Partly_Cloudy	5	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	5	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Partly_Cloudy	5	5	41	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	5	41	DIRT_ROAD	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	5	5	41	DIRT_ROAD	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Partly_Cloudy	5	5	41	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Partly_Cloudy	5	5	41	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	5	5	41	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	5	5	41	DIRT_ROAD	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Partly_Cloudy	5	5	41	DIRT_ROAD	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Partly_Cloudy	5	5	41	DIRT_ROAD	0	1.75	2.05	2.40	6.3	7.4	8.6	3.9	4.6	5.4
Partly_Cloudy	5	5	41	DIRT_ROAD	5	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Partly_Cloudy	5	5	41	DIRT_ROAD	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	5	5	41	DIRT_ROAD	15	0.75	0.90	1.20	2.7	3.2	4.3	1.7	2.0	2.7
Partly_Cloudy	5	5	41	DIRT_ROAD	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Partly_Cloudy	5	5	41	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Partly_Cloudy	5	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	5	5	41	DIRT_ROAD	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	5	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	5	5	41	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Partly_Cloudy	5	5	41	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Partly_Cloudy	5	5	41	LOOSE_SAND	-20	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Partly_Cloudy	5	5	41	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Partly_Cloudy	5	5	41	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Partly_Cloudy	5	5	41	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Partly_Cloudy	5	5	41	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Partly_Cloudy	5	5	41	LOOSE_SAND	5	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Partly_Cloudy	5	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	5	5	41	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Partly_Cloudy	5	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	5	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	5	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	5	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table G-2. Maximum Sustainable Speed, Partly Cloudy, 5% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	5	10	50	BLACK_TOP	-50	0.95	1.20	1.60	3.4	4.3	5.8	2.1	2.7	3.6
Partly_Cloudy	5	10	50	BLACK_TOP	-40	1.05	1.30	1.75	3.8	4.7	6.3	2.4	2.9	3.9
Partly_Cloudy	5	10	50	BLACK_TOP	-30	1.20	1.45	1.90	4.3	5.2	6.8	2.7	3.2	4.3
Partly_Cloudy	5	10	50	BLACK_TOP	-20	1.35	1.60	2.10	4.9	5.8	7.6	3.0	3.6	4.7
Partly_Cloudy	5	10	50	BLACK_TOP	-15	1.45	1.70	2.20	5.2	6.1	7.9	3.2	3.8	4.9
Partly_Cloudy	5	10	50	BLACK_TOP	-10	1.55	1.80	2.30	5.6	6.5	8.3	3.5	4.0	5.2
Partly_Cloudy	5	10	50	BLACK_TOP	-5	1.65	1.90	2.40	5.9	6.8	8.6	3.7	4.3	5.4
Partly_Cloudy	5	10	50	BLACK_TOP	0	1.75	2.05	2.50	6.3	7.4	9.0	3.9	4.6	5.6
Partly_Cloudy	5	10	50	BLACK_TOP	5	1.25	1.55	2.00	4.5	5.6	7.2	2.8	3.5	4.5
Partly_Cloudy	5	10	50	BLACK_TOP	10	0.95	1.20	1.60	3.4	4.3	5.8	2.1	2.7	3.6
Partly_Cloudy	5	10	50	BLACK_TOP	15	0.70	0.95	1.30	2.5	3.4	4.7	1.6	2.1	2.9
Partly_Cloudy	5	10	50	BLACK_TOP	20	0.60	0.75	1.10	2.2	2.7	4.0	1.3	1.7	2.5
Partly_Cloudy	5	10	50	BLACK_TOP	30	0.40	0.55	0.80	1.4	2.0	2.9	0.9	1.2	1.8
Partly_Cloudy	5	10	50	BLACK_TOP	40	0.30	0.40	0.65	1.1	1.4	2.3	0.7	0.9	1.5
Partly_Cloudy	5	10	50	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	10	50	DIRT_ROAD	-50	0.85	1.10	1.50	3.1	4.0	5.4	1.9	2.5	3.4
Partly_Cloudy	5	10	50	DIRT_ROAD	-40	1.00	1.20	1.65	3.6	4.3	5.9	2.2	2.7	3.7
Partly_Cloudy	5	10	50	DIRT_ROAD	-30	1.10	1.35	1.80	4.0	4.9	6.5	2.5	3.0	4.0
Partly_Cloudy	5	10	50	DIRT_ROAD	-20	1.25	1.55	2.00	4.5	5.6	7.2	2.8	3.5	4.5
Partly_Cloudy	5	10	50	DIRT_ROAD	-15	1.35	1.60	2.10	4.9	5.8	7.6	3.0	3.6	4.7
Partly_Cloudy	5	10	50	DIRT_ROAD	-10	1.45	1.70	2.20	5.2	6.1	7.9	3.2	3.8	4.9
Partly_Cloudy	5	10	50	DIRT_ROAD	-5	1.55	1.85	2.30	5.6	6.7	8.3	3.5	4.1	5.2
Partly_Cloudy	5	10	50	DIRT_ROAD	0	1.70	1.95	2.40	6.1	7.0	8.6	3.8	4.4	5.4
Partly_Cloudy	5	10	50	DIRT_ROAD	5	1.20	1.45	1.90	4.3	5.2	6.8	2.7	3.2	4.3
Partly_Cloudy	5	10	50	DIRT_ROAD	10	0.85	1.10	1.50	3.1	4.0	5.4	1.9	2.5	3.4
Partly_Cloudy	5	10	50	DIRT_ROAD	15	0.65	0.85	1.20	2.3	3.1	4.3	1.5	1.9	2.7
Partly_Cloudy	5	10	50	DIRT_ROAD	20	0.55	0.70	1.00	2.0	2.5	3.6	1.2	1.6	2.2
Partly_Cloudy	5	10	50	DIRT_ROAD	30	0.35	0.50	0.75	1.3	1.8	2.7	0.8	1.1	1.7
Partly_Cloudy	5	10	50	DIRT_ROAD	40	0.30	0.35	0.55	1.1	1.3	2.0	0.7	0.8	1.2
Partly_Cloudy	5	10	50	DIRT_ROAD	50	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Partly_Cloudy	5	10	50	LOOSE_SAND	-50	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Partly_Cloudy	5	10	50	LOOSE_SAND	-40	0.60	0.75	1.05	2.2	2.7	3.8	1.3	1.7	2.4
Partly_Cloudy	5	10	50	LOOSE_SAND	-30	0.70	0.85	1.15	2.5	3.1	4.1	1.6	1.9	2.6
Partly_Cloudy	5	10	50	LOOSE_SAND	-20	0.85	1.00	1.35	3.1	3.6	4.9	1.9	2.2	3.0
Partly_Cloudy	5	10	50	LOOSE_SAND	-15	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Partly_Cloudy	5	10	50	LOOSE_SAND	-10	1.00	1.20	1.50	3.6	4.3	5.4	2.2	2.7	3.4
Partly_Cloudy	5	10	50	LOOSE_SAND	-5	1.10	1.30	1.60	4.0	4.7	5.8	2.5	2.9	3.6
Partly_Cloudy	5	10	50	LOOSE_SAND	0	1.20	1.40	1.75	4.3	5.0	6.3	2.7	3.1	3.9
Partly_Cloudy	5	10	50	LOOSE_SAND	5	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Partly_Cloudy	5	10	50	LOOSE_SAND	10	0.50	0.65	0.90	1.8	2.3	3.2	1.1	1.5	2.0
Partly_Cloudy	5	10	50	LOOSE_SAND	15	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Partly_Cloudy	5	10	50	LOOSE_SAND	20	0.30	0.35	0.55	1.1	1.3	2.0	0.7	0.8	1.2
Partly_Cloudy	5	10	50	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	5	10	50	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	5	10	50	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table G-3. Maximum Sustainable Speed, Partly Cloudy, 5% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	5	15	59	BLACK_TOP	-50	0.85	1.10	1.45	3.1	4.0	5.2	1.9	2.5	3.2
Partly_Cloudy	5	15	59	BLACK_TOP	-40	0.95	1.20	1.60	3.4	4.3	5.8	2.1	2.7	3.6
Partly_Cloudy	5	15	59	BLACK_TOP	-30	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Partly_Cloudy	5	15	59	BLACK_TOP	-20	1.25	1.55	1.95	4.5	5.6	7.0	2.8	3.5	4.4
Partly_Cloudy	5	15	59	BLACK_TOP	-15	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	5	15	59	BLACK_TOP	-10	1.45	1.70	2.15	5.2	6.1	7.7	3.2	3.8	4.8
Partly_Cloudy	5	15	59	BLACK_TOP	-5	1.55	1.85	2.25	5.6	6.7	8.1	3.5	4.1	5.0
Partly_Cloudy	5	15	59	BLACK_TOP	0	1.65	1.95	2.35	5.9	7.0	8.5	3.7	4.4	5.3
Partly_Cloudy	5	15	59	BLACK_TOP	5	1.15	1.45	1.85	4.1	5.2	6.7	2.6	3.2	4.1
Partly_Cloudy	5	15	59	BLACK_TOP	10	0.85	1.10	1.45	3.1	4.0	5.2	1.9	2.5	3.2
Partly_Cloudy	5	15	59	BLACK_TOP	15	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Partly_Cloudy	5	15	59	BLACK_TOP	20	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Partly_Cloudy	5	15	59	BLACK_TOP	30	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Partly_Cloudy	5	15	59	BLACK_TOP	40	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Partly_Cloudy	5	15	59	BLACK_TOP	50	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Partly_Cloudy	5	15	59	DIRT_ROAD	-50	0.80	1.00	1.35	2.9	3.6	4.9	1.8	2.2	3.0
Partly_Cloudy	5	15	59	DIRT_ROAD	-40	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Partly_Cloudy	5	15	59	DIRT_ROAD	-30	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Partly_Cloudy	5	15	59	DIRT_ROAD	-20	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Partly_Cloudy	5	15	59	DIRT_ROAD	-15	1.25	1.55	1.90	4.5	5.6	6.8	2.8	3.5	4.3
Partly_Cloudy	5	15	59	DIRT_ROAD	-10	1.35	1.65	2.00	4.9	5.9	7.2	3.0	3.7	4.5
Partly_Cloudy	5	15	59	DIRT_ROAD	-5	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Partly_Cloudy	5	15	59	DIRT_ROAD	0	1.60	1.85	2.25	5.8	6.7	8.1	3.6	4.1	5.0
Partly_Cloudy	5	15	59	DIRT_ROAD	5	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Partly_Cloudy	5	15	59	DIRT_ROAD	10	0.80	1.00	1.35	2.9	3.6	4.9	1.8	2.2	3.0
Partly_Cloudy	5	15	59	DIRT_ROAD	15	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Partly_Cloudy	5	15	59	DIRT_ROAD	20	0.45	0.65	0.90	1.6	2.3	3.2	1.0	1.5	2.0
Partly_Cloudy	5	15	59	DIRT_ROAD	30	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Partly_Cloudy	5	15	59	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	15	59	DIRT_ROAD	50	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	5	15	59	LOOSE_SAND	-50	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	5	15	59	LOOSE_SAND	-40	0.55	0.70	0.95	2.0	2.5	3.4	1.2	1.6	2.1
Partly_Cloudy	5	15	59	LOOSE_SAND	-30	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Partly_Cloudy	5	15	59	LOOSE_SAND	-20	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Partly_Cloudy	5	15	59	LOOSE_SAND	-15	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Partly_Cloudy	5	15	59	LOOSE_SAND	-10	0.95	1.10	1.40	3.4	4.0	5.0	2.1	2.5	3.1
Partly_Cloudy	5	15	59	LOOSE_SAND	-5	1.05	1.20	1.50	3.8	4.3	5.4	2.4	2.7	3.4
Partly_Cloudy	5	15	59	LOOSE_SAND	0	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Partly_Cloudy	5	15	59	LOOSE_SAND	5	0.70	0.85	1.15	2.5	3.1	4.1	1.6	1.9	2.6
Partly_Cloudy	5	15	59	LOOSE_SAND	10	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	5	15	59	LOOSE_SAND	15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	5	15	59	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	15	59	LOOSE_SAND	30	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	15	59	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	5	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table G-4. Maximum Sustainable Speed, Partly Cloudy, 5% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	5	20	68	BLACK_TOP	-50	0.75	1.00	1.35	2.7	3.6	4.9	1.7	2.2	3.0
Partly_Cloudy	5	20	68	BLACK_TOP	-40	0.85	1.15	1.45	3.1	4.1	5.2	1.9	2.6	3.2
Partly_Cloudy	5	20	68	BLACK_TOP	-30	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	5	20	68	BLACK_TOP	-20	1.15	1.45	1.80	4.1	5.2	6.5	2.6	3.2	4.0
Partly_Cloudy	5	20	68	BLACK_TOP	-15	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	5	20	68	BLACK_TOP	-10	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	5	20	68	BLACK_TOP	-5	1.45	1.75	2.10	5.2	6.3	7.6	3.2	3.9	4.7
Partly_Cloudy	5	20	68	BLACK_TOP	0	1.55	1.85	2.20	5.6	6.7	7.9	3.5	4.1	4.9
Partly_Cloudy	5	20	68	BLACK_TOP	5	1.05	1.35	1.70	3.8	4.9	6.1	2.4	3.0	3.8
Partly_Cloudy	5	20	68	BLACK_TOP	10	0.75	1.00	1.35	2.7	3.6	4.9	1.7	2.2	3.0
Partly_Cloudy	5	20	68	BLACK_TOP	15	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Partly_Cloudy	5	20	68	BLACK_TOP	20	0.45	0.65	0.90	1.6	2.3	3.2	1.0	1.5	2.0
Partly_Cloudy	5	20	68	BLACK_TOP	30	0.30	0.45	0.65	1.1	1.6	2.3	0.7	1.0	1.5
Partly_Cloudy	5	20	68	BLACK_TOP	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	20	68	BLACK_TOP	50	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	5	20	68	DIRT_ROAD	-50	0.70	0.95	1.25	2.5	3.4	4.5	1.6	2.1	2.8
Partly_Cloudy	5	20	68	DIRT_ROAD	-40	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Partly_Cloudy	5	20	68	DIRT_ROAD	-30	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Partly_Cloudy	5	20	68	DIRT_ROAD	-20	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Partly_Cloudy	5	20	68	DIRT_ROAD	-15	1.15	1.45	1.80	4.1	5.2	6.5	2.6	3.2	4.0
Partly_Cloudy	5	20	68	DIRT_ROAD	-10	1.25	1.55	1.90	4.5	5.6	6.8	2.8	3.5	4.3
Partly_Cloudy	5	20	68	DIRT_ROAD	-5	1.35	1.65	2.00	4.9	5.9	7.2	3.0	3.7	4.5
Partly_Cloudy	5	20	68	DIRT_ROAD	0	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Partly_Cloudy	5	20	68	DIRT_ROAD	5	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	5	20	68	DIRT_ROAD	10	0.70	0.95	1.25	2.5	3.4	4.5	1.6	2.1	2.8
Partly_Cloudy	5	20	68	DIRT_ROAD	15	0.55	0.70	1.00	2.0	2.5	3.6	1.2	1.6	2.2
Partly_Cloudy	5	20	68	DIRT_ROAD	20	0.40	0.60	0.80	1.4	2.2	2.9	0.9	1.3	1.8
Partly_Cloudy	5	20	68	DIRT_ROAD	30	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Partly_Cloudy	5	20	68	DIRT_ROAD	40	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Partly_Cloudy	5	20	68	DIRT_ROAD	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	20	68	LOOSE_SAND	-50	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Partly_Cloudy	5	20	68	LOOSE_SAND	-40	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	5	20	68	LOOSE_SAND	-30	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Partly_Cloudy	5	20	68	LOOSE_SAND	-20	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Partly_Cloudy	5	20	68	LOOSE_SAND	-15	0.75	0.95	1.20	2.7	3.4	4.3	1.7	2.1	2.7
Partly_Cloudy	5	20	68	LOOSE_SAND	-10	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Partly_Cloudy	5	20	68	LOOSE_SAND	-5	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Partly_Cloudy	5	20	68	LOOSE_SAND	0	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Partly_Cloudy	5	20	68	LOOSE_SAND	5	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Partly_Cloudy	5	20	68	LOOSE_SAND	10	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Partly_Cloudy	5	20	68	LOOSE_SAND	15	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	5	20	68	LOOSE_SAND	20	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Partly_Cloudy	5	20	68	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	5	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	5	20	68	LOOSE_SAND	50	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4

Table G-5. Maximum Sustainable Speed, Partly Cloudy, 5% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	5	25	77	BLACK_TOP	-50	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Partly_Cloudy	5	25	77	BLACK_TOP	-40	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Partly_Cloudy	5	25	77	BLACK_TOP	-30	0.90	1.15	1.50	3.2	4.1	5.4	2.0	2.6	3.4
Partly_Cloudy	5	25	77	BLACK_TOP	-20	1.05	1.35	1.65	3.8	4.9	5.9	2.4	3.0	3.7
Partly_Cloudy	5	25	77	BLACK_TOP	-15	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Partly_Cloudy	5	25	77	BLACK_TOP	-10	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Partly_Cloudy	5	25	77	BLACK_TOP	-5	1.35	1.65	1.95	4.9	5.9	7.0	3.0	3.7	4.4
Partly_Cloudy	5	25	77	BLACK_TOP	0	1.45	1.75	2.05	5.2	6.3	7.4	3.2	3.9	4.6
Partly_Cloudy	5	25	77	BLACK_TOP	5	0.95	1.25	1.55	3.4	4.5	5.6	2.1	2.8	3.5
Partly_Cloudy	5	25	77	BLACK_TOP	10	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Partly_Cloudy	5	25	77	BLACK_TOP	15	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Partly_Cloudy	5	25	77	BLACK_TOP	20	0.40	0.55	0.80	1.4	2.0	2.9	0.9	1.2	1.8
Partly_Cloudy	5	25	77	BLACK_TOP	30	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Partly_Cloudy	5	25	77	BLACK_TOP	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	5	25	77	BLACK_TOP	50	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	25	77	DIRT_ROAD	-50	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Partly_Cloudy	5	25	77	DIRT_ROAD	-40	0.70	0.95	1.25	2.5	3.4	4.5	1.6	2.1	2.8
Partly_Cloudy	5	25	77	DIRT_ROAD	-30	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Partly_Cloudy	5	25	77	DIRT_ROAD	-20	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Partly_Cloudy	5	25	77	DIRT_ROAD	-15	1.05	1.35	1.65	3.8	4.9	5.9	2.4	3.0	3.7
Partly_Cloudy	5	25	77	DIRT_ROAD	-10	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Partly_Cloudy	5	25	77	DIRT_ROAD	-5	1.25	1.55	1.85	4.5	5.6	6.7	2.8	3.5	4.1
Partly_Cloudy	5	25	77	DIRT_ROAD	0	1.35	1.65	1.95	4.9	5.9	7.0	3.0	3.7	4.4
Partly_Cloudy	5	25	77	DIRT_ROAD	5	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Partly_Cloudy	5	25	77	DIRT_ROAD	10	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Partly_Cloudy	5	25	77	DIRT_ROAD	15	0.45	0.65	0.90	1.6	2.3	3.2	1.0	1.5	2.0
Partly_Cloudy	5	25	77	DIRT_ROAD	20	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Partly_Cloudy	5	25	77	DIRT_ROAD	30	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	25	77	DIRT_ROAD	40	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	5	25	77	DIRT_ROAD	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	5	25	77	LOOSE_SAND	-50	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Partly_Cloudy	5	25	77	LOOSE_SAND	-40	0.40	0.60	0.75	1.4	2.2	2.7	0.9	1.3	1.7
Partly_Cloudy	5	25	77	LOOSE_SAND	-30	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Partly_Cloudy	5	25	77	LOOSE_SAND	-20	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Partly_Cloudy	5	25	77	LOOSE_SAND	-15	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Partly_Cloudy	5	25	77	LOOSE_SAND	-10	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Partly_Cloudy	5	25	77	LOOSE_SAND	-5	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Partly_Cloudy	5	25	77	LOOSE_SAND	0	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Partly_Cloudy	5	25	77	LOOSE_SAND	5	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Partly_Cloudy	5	25	77	LOOSE_SAND	10	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Partly_Cloudy	5	25	77	LOOSE_SAND	15	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	25	77	LOOSE_SAND	20	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	5	25	77	LOOSE_SAND	30	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Partly_Cloudy	5	25	77	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	5	25	77	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table G-6. Maximum Sustainable Speed, Partly Cloudy, 5% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	5	30	86	BLACK_TOP	-50	0.60	0.85	1.10	2.2	3.1	4.0	1.3	1.9	2.5
Partly_Cloudy	5	30	86	BLACK_TOP	-40	0.70	0.95	1.20	2.5	3.4	4.3	1.6	2.1	2.7
Partly_Cloudy	5	30	86	BLACK_TOP	-30	0.80	1.05	1.35	2.9	3.8	4.9	1.8	2.4	3.0
Partly_Cloudy	5	30	86	BLACK_TOP	-20	0.95	1.25	1.50	3.4	4.5	5.4	2.1	2.8	3.4
Partly_Cloudy	5	30	86	BLACK_TOP	-15	1.00	1.30	1.60	3.6	4.7	5.8	2.2	2.9	3.6
Partly_Cloudy	5	30	86	BLACK_TOP	-10	1.10	1.40	1.70	4.0	5.0	6.1	2.5	3.1	3.8
Partly_Cloudy	5	30	86	BLACK_TOP	-5	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Partly_Cloudy	5	30	86	BLACK_TOP	0	1.30	1.65	1.90	4.7	5.9	6.8	2.9	3.7	4.3
Partly_Cloudy	5	30	86	BLACK_TOP	5	0.85	1.15	1.45	3.1	4.1	5.2	1.9	2.6	3.2
Partly_Cloudy	5	30	86	BLACK_TOP	10	0.60	0.85	1.10	2.2	3.1	4.0	1.3	1.9	2.5
Partly_Cloudy	5	30	86	BLACK_TOP	15	0.45	0.65	0.85	1.6	2.3	3.1	1.0	1.5	1.9
Partly_Cloudy	5	30	86	BLACK_TOP	20	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Partly_Cloudy	5	30	86	BLACK_TOP	30	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	5	30	86	BLACK_TOP	40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	30	86	BLACK_TOP	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	5	30	86	DIRT_ROAD	-50	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Partly_Cloudy	5	30	86	DIRT_ROAD	-40	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Partly_Cloudy	5	30	86	DIRT_ROAD	-30	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Partly_Cloudy	5	30	86	DIRT_ROAD	-20	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Partly_Cloudy	5	30	86	DIRT_ROAD	-15	0.95	1.25	1.50	3.4	4.5	5.4	2.1	2.8	3.4
Partly_Cloudy	5	30	86	DIRT_ROAD	-10	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Partly_Cloudy	5	30	86	DIRT_ROAD	-5	1.15	1.45	1.70	4.1	5.2	6.1	2.6	3.2	3.8
Partly_Cloudy	5	30	86	DIRT_ROAD	0	1.25	1.55	1.85	4.5	5.6	6.7	2.8	3.5	4.1
Partly_Cloudy	5	30	86	DIRT_ROAD	5	0.80	1.10	1.35	2.9	4.0	4.9	1.8	2.5	3.0
Partly_Cloudy	5	30	86	DIRT_ROAD	10	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Partly_Cloudy	5	30	86	DIRT_ROAD	15	0.40	0.60	0.80	1.4	2.2	2.9	0.9	1.3	1.8
Partly_Cloudy	5	30	86	DIRT_ROAD	20	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Partly_Cloudy	5	30	86	DIRT_ROAD	30	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Partly_Cloudy	5	30	86	DIRT_ROAD	40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	30	86	DIRT_ROAD	50	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Partly_Cloudy	5	30	86	LOOSE_SAND	-50	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Partly_Cloudy	5	30	86	LOOSE_SAND	-40	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Partly_Cloudy	5	30	86	LOOSE_SAND	-30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	5	30	86	LOOSE_SAND	-20	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Partly_Cloudy	5	30	86	LOOSE_SAND	-15	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Partly_Cloudy	5	30	86	LOOSE_SAND	-10	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Partly_Cloudy	5	30	86	LOOSE_SAND	-5	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Partly_Cloudy	5	30	86	LOOSE_SAND	0	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Partly_Cloudy	5	30	86	LOOSE_SAND	5	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Partly_Cloudy	5	30	86	LOOSE_SAND	10	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Partly_Cloudy	5	30	86	LOOSE_SAND	15	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Partly_Cloudy	5	30	86	LOOSE_SAND	20	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	30	86	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	5	30	86	LOOSE_SAND	40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	5	30	86	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table G-7. Maximum Sustainable Speed, Partly Cloudy, 5% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	5	35	95	BLACK_TOP	-50	0.50	0.75	0.95	1.8	2.7	3.4	1.1	1.7	2.1
Partly_Cloudy	5	35	95	BLACK_TOP	-40	0.60	0.85	1.05	2.2	3.1	3.8	1.3	1.9	2.4
Partly_Cloudy	5	35	95	BLACK_TOP	-30	0.70	0.95	1.20	2.5	3.4	4.3	1.6	2.1	2.7
Partly_Cloudy	5	35	95	BLACK_TOP	-20	0.80	1.10	1.35	2.9	4.0	4.9	1.8	2.5	3.0
Partly_Cloudy	5	35	95	BLACK_TOP	-15	0.90	1.20	1.45	3.2	4.3	5.2	2.0	2.7	3.2
Partly_Cloudy	5	35	95	BLACK_TOP	-10	1.00	1.30	1.55	3.6	4.7	5.6	2.2	2.9	3.5
Partly_Cloudy	5	35	95	BLACK_TOP	-5	1.10	1.40	1.65	4.0	5.0	5.9	2.5	3.1	3.7
Partly_Cloudy	5	35	95	BLACK_TOP	0	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Partly_Cloudy	5	35	95	BLACK_TOP	5	0.75	1.05	1.25	2.7	3.8	4.5	1.7	2.4	2.8
Partly_Cloudy	5	35	95	BLACK_TOP	10	0.50	0.75	0.95	1.8	2.7	3.4	1.1	1.7	2.1
Partly_Cloudy	5	35	95	BLACK_TOP	15	0.35	0.55	0.75	1.3	2.0	2.7	0.8	1.2	1.7
Partly_Cloudy	5	35	95	BLACK_TOP	20	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Partly_Cloudy	5	35	95	BLACK_TOP	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	5	35	95	BLACK_TOP	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	5	35	95	BLACK_TOP	50	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Partly_Cloudy	5	35	95	DIRT_ROAD	-50	0.45	0.70	0.90	1.6	2.5	3.2	1.0	1.6	2.0
Partly_Cloudy	5	35	95	DIRT_ROAD	-40	0.55	0.80	1.00	2.0	2.9	3.6	1.2	1.8	2.2
Partly_Cloudy	5	35	95	DIRT_ROAD	-30	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Partly_Cloudy	5	35	95	DIRT_ROAD	-20	0.75	1.05	1.30	2.7	3.8	4.7	1.7	2.4	2.9
Partly_Cloudy	5	35	95	DIRT_ROAD	-15	0.85	1.15	1.35	3.1	4.1	4.9	1.9	2.6	3.0
Partly_Cloudy	5	35	95	DIRT_ROAD	-10	0.95	1.25	1.45	3.4	4.5	5.2	2.1	2.8	3.2
Partly_Cloudy	5	35	95	DIRT_ROAD	-5	1.05	1.35	1.55	3.8	4.9	5.6	2.4	3.0	3.5
Partly_Cloudy	5	35	95	DIRT_ROAD	0	1.15	1.45	1.70	4.1	5.2	6.1	2.6	3.2	3.8
Partly_Cloudy	5	35	95	DIRT_ROAD	5	0.70	1.00	1.20	2.5	3.6	4.3	1.6	2.2	2.7
Partly_Cloudy	5	35	95	DIRT_ROAD	10	0.45	0.70	0.90	1.6	2.5	3.2	1.0	1.6	2.0
Partly_Cloudy	5	35	95	DIRT_ROAD	15	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Partly_Cloudy	5	35	95	DIRT_ROAD	20	0.25	0.40	0.55	0.9	1.4	2.0	0.6	0.9	1.2
Partly_Cloudy	5	35	95	DIRT_ROAD	30	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	35	95	DIRT_ROAD	40	0.10	0.20	0.30	0.4	0.7	1.1	0.2	0.4	0.7
Partly_Cloudy	5	35	95	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	5	35	95	LOOSE_SAND	-50	0.25	0.40	0.50	0.9	1.4	1.8	0.6	0.9	1.1
Partly_Cloudy	5	35	95	LOOSE_SAND	-40	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Partly_Cloudy	5	35	95	LOOSE_SAND	-30	0.35	0.55	0.70	1.3	2.0	2.5	0.8	1.2	1.6
Partly_Cloudy	5	35	95	LOOSE_SAND	-20	0.45	0.65	0.85	1.6	2.3	3.1	1.0	1.5	1.9
Partly_Cloudy	5	35	95	LOOSE_SAND	-15	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Partly_Cloudy	5	35	95	LOOSE_SAND	-10	0.60	0.85	1.00	2.2	3.1	3.6	1.3	1.9	2.2
Partly_Cloudy	5	35	95	LOOSE_SAND	-5	0.70	0.95	1.10	2.5	3.4	4.0	1.6	2.1	2.5
Partly_Cloudy	5	35	95	LOOSE_SAND	0	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Partly_Cloudy	5	35	95	LOOSE_SAND	5	0.40	0.60	0.75	1.4	2.2	2.7	0.9	1.3	1.7
Partly_Cloudy	5	35	95	LOOSE_SAND	10	0.25	0.40	0.50	0.9	1.4	1.8	0.6	0.9	1.1
Partly_Cloudy	5	35	95	LOOSE_SAND	15	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	5	35	95	LOOSE_SAND	20	0.10	0.20	0.30	0.4	0.7	1.1	0.2	0.4	0.7
Partly_Cloudy	5	35	95	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	5	35	95	LOOSE_SAND	40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	5	35	95	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table G-8. Maximum Sustainable Speed, Partly Cloudy, 25% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	25	5	41	BLACK_TOP	-50	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	25	5	41	BLACK_TOP	-40	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Partly_Cloudy	25	5	41	BLACK_TOP	-30	1.30	1.55	1.90	4.7	5.6	6.8	2.9	3.5	4.3
Partly_Cloudy	25	5	41	BLACK_TOP	-20	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	25	5	41	BLACK_TOP	-15	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Partly_Cloudy	25	5	41	BLACK_TOP	-10	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Partly_Cloudy	25	5	41	BLACK_TOP	-5	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Partly_Cloudy	25	5	41	BLACK_TOP	0	1.85	2.10	2.50	6.7	7.6	9.0	4.1	4.7	5.6
Partly_Cloudy	25	5	41	BLACK_TOP	5	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	25	5	41	BLACK_TOP	10	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	25	5	41	BLACK_TOP	15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Partly_Cloudy	25	5	41	BLACK_TOP	20	0.65	0.80	1.10	2.3	2.9	4.0	1.5	1.8	2.5
Partly_Cloudy	25	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	25	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Partly_Cloudy	25	5	41	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	25	5	41	DIRT_ROAD	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	25	5	41	DIRT_ROAD	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Partly_Cloudy	25	5	41	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Partly_Cloudy	25	5	41	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	25	5	41	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	25	5	41	DIRT_ROAD	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Partly_Cloudy	25	5	41	DIRT_ROAD	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Partly_Cloudy	25	5	41	DIRT_ROAD	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Partly_Cloudy	25	5	41	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	25	5	41	DIRT_ROAD	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	25	5	41	DIRT_ROAD	15	0.75	0.90	1.20	2.7	3.2	4.3	1.7	2.0	2.7
Partly_Cloudy	25	5	41	DIRT_ROAD	20	0.60	0.75	1.00	2.2	2.7	3.6	1.3	1.7	2.2
Partly_Cloudy	25	5	41	DIRT_ROAD	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Partly_Cloudy	25	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	25	5	41	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	25	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	25	5	41	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Partly_Cloudy	25	5	41	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Partly_Cloudy	25	5	41	LOOSE_SAND	-20	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Partly_Cloudy	25	5	41	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Partly_Cloudy	25	5	41	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Partly_Cloudy	25	5	41	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Partly_Cloudy	25	5	41	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Partly_Cloudy	25	5	41	LOOSE_SAND	5	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Partly_Cloudy	25	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	25	5	41	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Partly_Cloudy	25	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	25	5	41	LOOSE_SAND	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	25	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	25	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table G-9. Maximum Sustainable Speed, Partly Cloudy, 25% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	25	10	50	BLACK_TOP	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	25	10	50	BLACK_TOP	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Partly_Cloudy	25	10	50	BLACK_TOP	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Partly_Cloudy	25	10	50	BLACK_TOP	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	25	10	50	BLACK_TOP	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	25	10	50	BLACK_TOP	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Partly_Cloudy	25	10	50	BLACK_TOP	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Partly_Cloudy	25	10	50	BLACK_TOP	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Partly_Cloudy	25	10	50	BLACK_TOP	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	25	10	50	BLACK_TOP	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	25	10	50	BLACK_TOP	15	0.70	0.90	1.25	2.5	3.2	4.5	1.6	2.0	2.8
Partly_Cloudy	25	10	50	BLACK_TOP	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Partly_Cloudy	25	10	50	BLACK_TOP	30	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Partly_Cloudy	25	10	50	BLACK_TOP	40	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Partly_Cloudy	25	10	50	BLACK_TOP	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	25	10	50	DIRT_ROAD	-50	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Partly_Cloudy	25	10	50	DIRT_ROAD	-40	0.95	1.20	1.55	3.4	4.3	5.6	2.1	2.7	3.5
Partly_Cloudy	25	10	50	DIRT_ROAD	-30	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Partly_Cloudy	25	10	50	DIRT_ROAD	-20	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	25	10	50	DIRT_ROAD	-15	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	25	10	50	DIRT_ROAD	-10	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	25	10	50	DIRT_ROAD	-5	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Partly_Cloudy	25	10	50	DIRT_ROAD	0	1.65	1.95	2.30	5.9	7.0	8.3	3.7	4.4	5.2
Partly_Cloudy	25	10	50	DIRT_ROAD	5	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Partly_Cloudy	25	10	50	DIRT_ROAD	10	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Partly_Cloudy	25	10	50	DIRT_ROAD	15	0.65	0.85	1.15	2.3	3.1	4.1	1.5	1.9	2.6
Partly_Cloudy	25	10	50	DIRT_ROAD	20	0.50	0.70	0.95	1.8	2.5	3.4	1.1	1.6	2.1
Partly_Cloudy	25	10	50	DIRT_ROAD	30	0.35	0.50	0.70	1.3	1.8	2.5	0.8	1.1	1.6
Partly_Cloudy	25	10	50	DIRT_ROAD	40	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Partly_Cloudy	25	10	50	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	25	10	50	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	25	10	50	LOOSE_SAND	-40	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Partly_Cloudy	25	10	50	LOOSE_SAND	-30	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Partly_Cloudy	25	10	50	LOOSE_SAND	-20	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Partly_Cloudy	25	10	50	LOOSE_SAND	-15	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Partly_Cloudy	25	10	50	LOOSE_SAND	-10	1.00	1.20	1.45	3.6	4.3	5.2	2.2	2.7	3.2
Partly_Cloudy	25	10	50	LOOSE_SAND	-5	1.10	1.30	1.55	4.0	4.7	5.6	2.5	2.9	3.5
Partly_Cloudy	25	10	50	LOOSE_SAND	0	1.20	1.40	1.65	4.3	5.0	5.9	2.7	3.1	3.7
Partly_Cloudy	25	10	50	LOOSE_SAND	5	0.75	0.90	1.20	2.7	3.2	4.3	1.7	2.0	2.7
Partly_Cloudy	25	10	50	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	25	10	50	LOOSE_SAND	15	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Partly_Cloudy	25	10	50	LOOSE_SAND	20	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Partly_Cloudy	25	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	25	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	25	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table G-10. Maximum Sustainable Speed, Partly Cloudy, 25% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	25	15	59	BLACK_TOP	-50	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Partly_Cloudy	25	15	59	BLACK_TOP	-40	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Partly_Cloudy	25	15	59	BLACK_TOP	-30	1.10	1.35	1.70	4.0	4.9	6.1	2.5	3.0	3.8
Partly_Cloudy	25	15	59	BLACK_TOP	-20	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Partly_Cloudy	25	15	59	BLACK_TOP	-15	1.35	1.60	1.95	4.9	5.8	7.0	3.0	3.6	4.4
Partly_Cloudy	25	15	59	BLACK_TOP	-10	1.45	1.70	2.05	5.2	6.1	7.4	3.2	3.8	4.6
Partly_Cloudy	25	15	59	BLACK_TOP	-5	1.55	1.80	2.15	5.6	6.5	7.7	3.5	4.0	4.8
Partly_Cloudy	25	15	59	BLACK_TOP	0	1.65	1.90	2.25	5.9	6.8	8.1	3.7	4.3	5.0
Partly_Cloudy	25	15	59	BLACK_TOP	5	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Partly_Cloudy	25	15	59	BLACK_TOP	10	0.85	1.10	1.40	3.1	4.0	5.0	1.9	2.5	3.1
Partly_Cloudy	25	15	59	BLACK_TOP	15	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Partly_Cloudy	25	15	59	BLACK_TOP	20	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Partly_Cloudy	25	15	59	BLACK_TOP	30	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Partly_Cloudy	25	15	59	BLACK_TOP	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	25	15	59	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	25	15	59	DIRT_ROAD	-50	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Partly_Cloudy	25	15	59	DIRT_ROAD	-40	0.90	1.10	1.40	3.2	4.0	5.0	2.0	2.5	3.1
Partly_Cloudy	25	15	59	DIRT_ROAD	-30	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	25	15	59	DIRT_ROAD	-20	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Partly_Cloudy	25	15	59	DIRT_ROAD	-15	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Partly_Cloudy	25	15	59	DIRT_ROAD	-10	1.35	1.60	1.95	4.9	5.8	7.0	3.0	3.6	4.4
Partly_Cloudy	25	15	59	DIRT_ROAD	-5	1.45	1.70	2.05	5.2	6.1	7.4	3.2	3.8	4.6
Partly_Cloudy	25	15	59	DIRT_ROAD	0	1.55	1.85	2.15	5.6	6.7	7.7	3.5	4.1	4.8
Partly_Cloudy	25	15	59	DIRT_ROAD	5	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Partly_Cloudy	25	15	59	DIRT_ROAD	10	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Partly_Cloudy	25	15	59	DIRT_ROAD	15	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Partly_Cloudy	25	15	59	DIRT_ROAD	20	0.45	0.60	0.85	1.6	2.2	3.1	1.0	1.3	1.9
Partly_Cloudy	25	15	59	DIRT_ROAD	30	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Partly_Cloudy	25	15	59	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	25	15	59	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	25	15	59	LOOSE_SAND	-50	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	25	15	59	LOOSE_SAND	-40	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Partly_Cloudy	25	15	59	LOOSE_SAND	-30	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Partly_Cloudy	25	15	59	LOOSE_SAND	-20	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Partly_Cloudy	25	15	59	LOOSE_SAND	-15	0.85	1.00	1.25	3.1	3.6	4.5	1.9	2.2	2.8
Partly_Cloudy	25	15	59	LOOSE_SAND	-10	0.90	1.10	1.35	3.2	4.0	4.9	2.0	2.5	3.0
Partly_Cloudy	25	15	59	LOOSE_SAND	-5	1.00	1.20	1.45	3.6	4.3	5.2	2.2	2.7	3.2
Partly_Cloudy	25	15	59	LOOSE_SAND	0	1.15	1.30	1.55	4.1	4.7	5.6	2.6	2.9	3.5
Partly_Cloudy	25	15	59	LOOSE_SAND	5	0.70	0.85	1.10	2.5	3.1	4.0	1.6	1.9	2.5
Partly_Cloudy	25	15	59	LOOSE_SAND	10	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	25	15	59	LOOSE_SAND	15	0.30	0.45	0.60	1.1	1.6	2.2	0.7	1.0	1.3
Partly_Cloudy	25	15	59	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	25	15	59	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	25	15	59	LOOSE_SAND	40	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	25	15	59	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table G-11. Maximum Sustainable Speed, Partly Cloudy, 25% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	25	20	68	BLACK_TOP	-50	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Partly_Cloudy	25	20	68	BLACK_TOP	-40	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Partly_Cloudy	25	20	68	BLACK_TOP	-30	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Partly_Cloudy	25	20	68	BLACK_TOP	-20	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Partly_Cloudy	25	20	68	BLACK_TOP	-15	1.20	1.50	1.80	4.3	5.4	6.5	2.7	3.4	4.0
Partly_Cloudy	25	20	68	BLACK_TOP	-10	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Partly_Cloudy	25	20	68	BLACK_TOP	-5	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Partly_Cloudy	25	20	68	BLACK_TOP	0	1.55	1.80	2.10	5.6	6.5	7.6	3.5	4.0	4.7
Partly_Cloudy	25	20	68	BLACK_TOP	5	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Partly_Cloudy	25	20	68	BLACK_TOP	10	0.75	1.00	1.25	2.7	3.6	4.5	1.7	2.2	2.8
Partly_Cloudy	25	20	68	BLACK_TOP	15	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Partly_Cloudy	25	20	68	BLACK_TOP	20	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	25	20	68	BLACK_TOP	30	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Partly_Cloudy	25	20	68	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	25	20	68	BLACK_TOP	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	25	20	68	DIRT_ROAD	-50	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Partly_Cloudy	25	20	68	DIRT_ROAD	-40	0.80	1.05	1.30	2.9	3.8	4.7	1.8	2.4	2.9
Partly_Cloudy	25	20	68	DIRT_ROAD	-30	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Partly_Cloudy	25	20	68	DIRT_ROAD	-20	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Partly_Cloudy	25	20	68	DIRT_ROAD	-15	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Partly_Cloudy	25	20	68	DIRT_ROAD	-10	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Partly_Cloudy	25	20	68	DIRT_ROAD	-5	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Partly_Cloudy	25	20	68	DIRT_ROAD	0	1.45	1.75	2.00	5.2	6.3	7.2	3.2	3.9	4.5
Partly_Cloudy	25	20	68	DIRT_ROAD	5	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Partly_Cloudy	25	20	68	DIRT_ROAD	10	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Partly_Cloudy	25	20	68	DIRT_ROAD	15	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Partly_Cloudy	25	20	68	DIRT_ROAD	20	0.40	0.55	0.75	1.4	2.0	2.7	0.9	1.2	1.7
Partly_Cloudy	25	20	68	DIRT_ROAD	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	25	20	68	DIRT_ROAD	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	25	20	68	DIRT_ROAD	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Partly_Cloudy	25	20	68	LOOSE_SAND	-50	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Partly_Cloudy	25	20	68	LOOSE_SAND	-40	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	25	20	68	LOOSE_SAND	-30	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Partly_Cloudy	25	20	68	LOOSE_SAND	-20	0.70	0.85	1.05	2.5	3.1	3.8	1.6	1.9	2.4
Partly_Cloudy	25	20	68	LOOSE_SAND	-15	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Partly_Cloudy	25	20	68	LOOSE_SAND	-10	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Partly_Cloudy	25	20	68	LOOSE_SAND	-5	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Partly_Cloudy	25	20	68	LOOSE_SAND	0	1.05	1.25	1.45	3.8	4.5	5.2	2.4	2.8	3.2
Partly_Cloudy	25	20	68	LOOSE_SAND	5	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Partly_Cloudy	25	20	68	LOOSE_SAND	10	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Partly_Cloudy	25	20	68	LOOSE_SAND	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	25	20	68	LOOSE_SAND	20	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	25	20	68	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	25	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	25	20	68	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table G-12. Maximum Sustainable Speed, Partly Cloudy, 25% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	25	25	77	BLACK_TOP	-50	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Partly_Cloudy	25	25	77	BLACK_TOP	-40	0.75	1.00	1.20	2.7	3.6	4.3	1.7	2.2	2.7
Partly_Cloudy	25	25	77	BLACK_TOP	-30	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Partly_Cloudy	25	25	77	BLACK_TOP	-20	1.00	1.30	1.50	3.6	4.7	5.4	2.2	2.9	3.4
Partly_Cloudy	25	25	77	BLACK_TOP	-15	1.10	1.40	1.60	4.0	5.0	5.8	2.5	3.1	3.6
Partly_Cloudy	25	25	77	BLACK_TOP	-10	1.20	1.50	1.70	4.3	5.4	6.1	2.7	3.4	3.8
Partly_Cloudy	25	25	77	BLACK_TOP	-5	1.30	1.60	1.80	4.7	5.8	6.5	2.9	3.6	4.0
Partly_Cloudy	25	25	77	BLACK_TOP	0	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Partly_Cloudy	25	25	77	BLACK_TOP	5	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Partly_Cloudy	25	25	77	BLACK_TOP	10	0.65	0.90	1.10	2.3	3.2	4.0	1.5	2.0	2.5
Partly_Cloudy	25	25	77	BLACK_TOP	15	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Partly_Cloudy	25	25	77	BLACK_TOP	20	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Partly_Cloudy	25	25	77	BLACK_TOP	30	0.25	0.40	0.50	0.9	1.4	1.8	0.6	0.9	1.1
Partly_Cloudy	25	25	77	BLACK_TOP	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	25	25	77	BLACK_TOP	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Partly_Cloudy	25	25	77	DIRT_ROAD	-50	0.60	0.85	1.00	2.2	3.1	3.6	1.3	1.9	2.2
Partly_Cloudy	25	25	77	DIRT_ROAD	-40	0.70	0.95	1.15	2.5	3.4	4.1	1.6	2.1	2.6
Partly_Cloudy	25	25	77	DIRT_ROAD	-30	0.80	1.05	1.25	2.9	3.8	4.5	1.8	2.4	2.8
Partly_Cloudy	25	25	77	DIRT_ROAD	-20	0.95	1.25	1.45	3.4	4.5	5.2	2.1	2.8	3.2
Partly_Cloudy	25	25	77	DIRT_ROAD	-15	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Partly_Cloudy	25	25	77	DIRT_ROAD	-10	1.15	1.40	1.60	4.1	5.0	5.8	2.6	3.1	3.6
Partly_Cloudy	25	25	77	DIRT_ROAD	-5	1.25	1.50	1.70	4.5	5.4	6.1	2.8	3.4	3.8
Partly_Cloudy	25	25	77	DIRT_ROAD	0	1.35	1.65	1.85	4.9	5.9	6.7	3.0	3.7	4.1
Partly_Cloudy	25	25	77	DIRT_ROAD	5	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Partly_Cloudy	25	25	77	DIRT_ROAD	10	0.60	0.85	1.00	2.2	3.1	3.6	1.3	1.9	2.2
Partly_Cloudy	25	25	77	DIRT_ROAD	15	0.45	0.65	0.80	1.6	2.3	2.9	1.0	1.5	1.8
Partly_Cloudy	25	25	77	DIRT_ROAD	20	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Partly_Cloudy	25	25	77	DIRT_ROAD	30	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	25	25	77	DIRT_ROAD	40	0.15	0.25	0.35	0.5	0.9	1.3	0.3	0.6	0.8
Partly_Cloudy	25	25	77	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	25	25	77	LOOSE_SAND	-50	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Partly_Cloudy	25	25	77	LOOSE_SAND	-40	0.40	0.55	0.70	1.4	2.0	2.5	0.9	1.2	1.6
Partly_Cloudy	25	25	77	LOOSE_SAND	-30	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Partly_Cloudy	25	25	77	LOOSE_SAND	-20	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Partly_Cloudy	25	25	77	LOOSE_SAND	-15	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Partly_Cloudy	25	25	77	LOOSE_SAND	-10	0.75	0.95	1.10	2.7	3.4	4.0	1.7	2.1	2.5
Partly_Cloudy	25	25	77	LOOSE_SAND	-5	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Partly_Cloudy	25	25	77	LOOSE_SAND	0	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Partly_Cloudy	25	25	77	LOOSE_SAND	5	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Partly_Cloudy	25	25	77	LOOSE_SAND	10	0.35	0.50	0.60	1.3	1.8	2.2	0.8	1.1	1.3
Partly_Cloudy	25	25	77	LOOSE_SAND	15	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	25	25	77	LOOSE_SAND	20	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	25	25	77	LOOSE_SAND	30	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	25	25	77	LOOSE_SAND	40	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Partly_Cloudy	25	25	77	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table G-13. Maximum Sustainable Speed, Partly Cloudy, 25% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	25	30	86	BLACK_TOP	-50	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Partly_Cloudy	25	30	86	BLACK_TOP	-40	0.65	0.90	1.00	2.3	3.2	3.6	1.5	2.0	2.2
Partly_Cloudy	25	30	86	BLACK_TOP	-30	0.75	1.00	1.15	2.7	3.6	4.1	1.7	2.2	2.6
Partly_Cloudy	25	30	86	BLACK_TOP	-20	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Partly_Cloudy	25	30	86	BLACK_TOP	-15	1.00	1.25	1.40	3.6	4.5	5.0	2.2	2.8	3.1
Partly_Cloudy	25	30	86	BLACK_TOP	-10	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Partly_Cloudy	25	30	86	BLACK_TOP	-5	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Partly_Cloudy	25	30	86	BLACK_TOP	0	1.30	1.55	1.70	4.7	5.6	6.1	2.9	3.5	3.8
Partly_Cloudy	25	30	86	BLACK_TOP	5	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Partly_Cloudy	25	30	86	BLACK_TOP	10	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Partly_Cloudy	25	30	86	BLACK_TOP	15	0.40	0.60	0.70	1.4	2.2	2.5	0.9	1.3	1.6
Partly_Cloudy	25	30	86	BLACK_TOP	20	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Partly_Cloudy	25	30	86	BLACK_TOP	30	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	25	30	86	BLACK_TOP	40	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Partly_Cloudy	25	30	86	BLACK_TOP	50	0.10	0.20	0.25	0.4	0.7	0.9	0.2	0.4	0.6
Partly_Cloudy	25	30	86	DIRT_ROAD	-50	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Partly_Cloudy	25	30	86	DIRT_ROAD	-40	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Partly_Cloudy	25	30	86	DIRT_ROAD	-30	0.70	0.95	1.10	2.5	3.4	4.0	1.6	2.1	2.5
Partly_Cloudy	25	30	86	DIRT_ROAD	-20	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Partly_Cloudy	25	30	86	DIRT_ROAD	-15	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Partly_Cloudy	25	30	86	DIRT_ROAD	-10	1.00	1.25	1.40	3.6	4.5	5.0	2.2	2.8	3.1
Partly_Cloudy	25	30	86	DIRT_ROAD	-5	1.10	1.35	1.55	4.0	4.9	5.6	2.5	3.0	3.5
Partly_Cloudy	25	30	86	DIRT_ROAD	0	1.25	1.50	1.65	4.5	5.4	5.9	2.8	3.4	3.7
Partly_Cloudy	25	30	86	DIRT_ROAD	5	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Partly_Cloudy	25	30	86	DIRT_ROAD	10	0.50	0.70	0.85	1.8	2.5	3.1	1.1	1.6	1.9
Partly_Cloudy	25	30	86	DIRT_ROAD	15	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Partly_Cloudy	25	30	86	DIRT_ROAD	20	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	25	30	86	DIRT_ROAD	30	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	25	30	86	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	25	30	86	DIRT_ROAD	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	25	30	86	LOOSE_SAND	-50	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	25	30	86	LOOSE_SAND	-40	0.35	0.50	0.55	1.3	1.8	2.0	0.8	1.1	1.2
Partly_Cloudy	25	30	86	LOOSE_SAND	-30	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Partly_Cloudy	25	30	86	LOOSE_SAND	-20	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Partly_Cloudy	25	30	86	LOOSE_SAND	-15	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Partly_Cloudy	25	30	86	LOOSE_SAND	-10	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Partly_Cloudy	25	30	86	LOOSE_SAND	-5	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Partly_Cloudy	25	30	86	LOOSE_SAND	0	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Partly_Cloudy	25	30	86	LOOSE_SAND	5	0.45	0.65	0.75	1.6	2.3	2.7	1.0	1.5	1.7
Partly_Cloudy	25	30	86	LOOSE_SAND	10	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	25	30	86	LOOSE_SAND	15	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	25	30	86	LOOSE_SAND	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	25	30	86	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	25	30	86	LOOSE_SAND	40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	25	30	86	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table G-14. Maximum Sustainable Speed, Partly Cloudy, 25% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	25	35	95	BLACK_TOP	-50	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Partly_Cloudy	25	35	95	BLACK_TOP	-40	0.55	0.70	0.80	2.0	2.5	2.9	1.2	1.6	1.8
Partly_Cloudy	25	35	95	BLACK_TOP	-30	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Partly_Cloudy	25	35	95	BLACK_TOP	-20	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Partly_Cloudy	25	35	95	BLACK_TOP	-15	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Partly_Cloudy	25	35	95	BLACK_TOP	-10	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Partly_Cloudy	25	35	95	BLACK_TOP	-5	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Partly_Cloudy	25	35	95	BLACK_TOP	0	1.15	1.30	1.50	4.1	4.7	5.4	2.6	2.9	3.4
Partly_Cloudy	25	35	95	BLACK_TOP	5	0.70	0.85	1.00	2.5	3.1	3.6	1.6	1.9	2.2
Partly_Cloudy	25	35	95	BLACK_TOP	10	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Partly_Cloudy	25	35	95	BLACK_TOP	15	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Partly_Cloudy	25	35	95	BLACK_TOP	20	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Partly_Cloudy	25	35	95	BLACK_TOP	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	25	35	95	BLACK_TOP	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	25	35	95	BLACK_TOP	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Partly_Cloudy	25	35	95	DIRT_ROAD	-50	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	25	35	95	DIRT_ROAD	-40	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Partly_Cloudy	25	35	95	DIRT_ROAD	-30	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Partly_Cloudy	25	35	95	DIRT_ROAD	-20	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Partly_Cloudy	25	35	95	DIRT_ROAD	-15	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Partly_Cloudy	25	35	95	DIRT_ROAD	-10	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Partly_Cloudy	25	35	95	DIRT_ROAD	-5	1.00	1.15	1.30	3.6	4.1	4.7	2.2	2.6	2.9
Partly_Cloudy	25	35	95	DIRT_ROAD	0	1.10	1.25	1.40	4.0	4.5	5.0	2.5	2.8	3.1
Partly_Cloudy	25	35	95	DIRT_ROAD	5	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Partly_Cloudy	25	35	95	DIRT_ROAD	10	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	25	35	95	DIRT_ROAD	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	25	35	95	DIRT_ROAD	20	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	25	35	95	DIRT_ROAD	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	25	35	95	DIRT_ROAD	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	25	35	95	DIRT_ROAD	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	25	35	95	LOOSE_SAND	-50	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	25	35	95	LOOSE_SAND	-40	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	25	35	95	LOOSE_SAND	-30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Partly_Cloudy	25	35	95	LOOSE_SAND	-20	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	25	35	95	LOOSE_SAND	-15	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Partly_Cloudy	25	35	95	LOOSE_SAND	-10	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Partly_Cloudy	25	35	95	LOOSE_SAND	-5	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Partly_Cloudy	25	35	95	LOOSE_SAND	0	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Partly_Cloudy	25	35	95	LOOSE_SAND	5	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	25	35	95	LOOSE_SAND	10	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	25	35	95	LOOSE_SAND	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	25	35	95	LOOSE_SAND	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	25	35	95	LOOSE_SAND	30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	25	35	95	LOOSE_SAND	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	25	35	95	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table G-15. Maximum Sustainable Speed, Partly Cloudy, 50% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	50	5	41	BLACK_TOP	-50	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	50	5	41	BLACK_TOP	-40	1.15	1.35	1.75	4.1	4.9	6.3	2.6	3.0	3.9
Partly_Cloudy	50	5	41	BLACK_TOP	-30	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	50	5	41	BLACK_TOP	-20	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	50	5	41	BLACK_TOP	-15	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Partly_Cloudy	50	5	41	BLACK_TOP	-10	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Partly_Cloudy	50	5	41	BLACK_TOP	-5	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Partly_Cloudy	50	5	41	BLACK_TOP	0	1.85	2.10	2.50	6.7	7.6	9.0	4.1	4.7	5.6
Partly_Cloudy	50	5	41	BLACK_TOP	5	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	50	5	41	BLACK_TOP	10	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	50	5	41	BLACK_TOP	15	0.80	1.00	1.30	2.9	3.6	4.7	1.8	2.2	2.9
Partly_Cloudy	50	5	41	BLACK_TOP	20	0.65	0.80	1.10	2.3	2.9	4.0	1.5	1.8	2.5
Partly_Cloudy	50	5	41	BLACK_TOP	30	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	50	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Partly_Cloudy	50	5	41	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	50	5	41	DIRT_ROAD	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	50	5	41	DIRT_ROAD	-40	1.05	1.30	1.65	3.8	4.7	5.9	2.4	2.9	3.7
Partly_Cloudy	50	5	41	DIRT_ROAD	-30	1.20	1.45	1.80	4.3	5.2	6.5	2.7	3.2	4.0
Partly_Cloudy	50	5	41	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	50	5	41	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	50	5	41	DIRT_ROAD	-10	1.55	1.80	2.20	5.6	6.5	7.9	3.5	4.0	4.9
Partly_Cloudy	50	5	41	DIRT_ROAD	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Partly_Cloudy	50	5	41	DIRT_ROAD	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Partly_Cloudy	50	5	41	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	50	5	41	DIRT_ROAD	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	50	5	41	DIRT_ROAD	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Partly_Cloudy	50	5	41	DIRT_ROAD	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Partly_Cloudy	50	5	41	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Partly_Cloudy	50	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	50	5	41	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	50	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	50	5	41	LOOSE_SAND	-40	0.65	0.80	1.05	2.3	2.9	3.8	1.5	1.8	2.4
Partly_Cloudy	50	5	41	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Partly_Cloudy	50	5	41	LOOSE_SAND	-20	0.90	1.05	1.35	3.2	3.8	4.9	2.0	2.4	3.0
Partly_Cloudy	50	5	41	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Partly_Cloudy	50	5	41	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Partly_Cloudy	50	5	41	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Partly_Cloudy	50	5	41	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Partly_Cloudy	50	5	41	LOOSE_SAND	5	0.80	1.00	1.25	2.9	3.6	4.5	1.8	2.2	2.8
Partly_Cloudy	50	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	50	5	41	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Partly_Cloudy	50	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	50	5	41	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	50	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	50	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table G-16. Maximum Sustainable Speed, Partly Cloudy, 50% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	50	10	50	BLACK_TOP	-50	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Partly_Cloudy	50	10	50	BLACK_TOP	-40	1.05	1.30	1.60	3.8	4.7	5.8	2.4	2.9	3.6
Partly_Cloudy	50	10	50	BLACK_TOP	-30	1.15	1.45	1.75	4.1	5.2	6.3	2.6	3.2	3.9
Partly_Cloudy	50	10	50	BLACK_TOP	-20	1.35	1.60	1.95	4.9	5.8	7.0	3.0	3.6	4.4
Partly_Cloudy	50	10	50	BLACK_TOP	-15	1.40	1.70	2.05	5.0	6.1	7.4	3.1	3.8	4.6
Partly_Cloudy	50	10	50	BLACK_TOP	-10	1.50	1.80	2.15	5.4	6.5	7.7	3.4	4.0	4.8
Partly_Cloudy	50	10	50	BLACK_TOP	-5	1.60	1.90	2.25	5.8	6.8	8.1	3.6	4.3	5.0
Partly_Cloudy	50	10	50	BLACK_TOP	0	1.75	2.00	2.35	6.3	7.2	8.5	3.9	4.5	5.3
Partly_Cloudy	50	10	50	BLACK_TOP	5	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Partly_Cloudy	50	10	50	BLACK_TOP	10	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Partly_Cloudy	50	10	50	BLACK_TOP	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Partly_Cloudy	50	10	50	BLACK_TOP	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Partly_Cloudy	50	10	50	BLACK_TOP	30	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Partly_Cloudy	50	10	50	BLACK_TOP	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	50	10	50	BLACK_TOP	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	50	10	50	DIRT_ROAD	-50	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Partly_Cloudy	50	10	50	DIRT_ROAD	-40	0.95	1.20	1.50	3.4	4.3	5.4	2.1	2.7	3.4
Partly_Cloudy	50	10	50	DIRT_ROAD	-30	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Partly_Cloudy	50	10	50	DIRT_ROAD	-20	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Partly_Cloudy	50	10	50	DIRT_ROAD	-15	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Partly_Cloudy	50	10	50	DIRT_ROAD	-10	1.45	1.70	2.05	5.2	6.1	7.4	3.2	3.8	4.6
Partly_Cloudy	50	10	50	DIRT_ROAD	-5	1.55	1.80	2.15	5.6	6.5	7.7	3.5	4.0	4.8
Partly_Cloudy	50	10	50	DIRT_ROAD	0	1.65	1.90	2.25	5.9	6.8	8.1	3.7	4.3	5.0
Partly_Cloudy	50	10	50	DIRT_ROAD	5	1.15	1.40	1.75	4.1	5.0	6.3	2.6	3.1	3.9
Partly_Cloudy	50	10	50	DIRT_ROAD	10	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Partly_Cloudy	50	10	50	DIRT_ROAD	15	0.65	0.85	1.10	2.3	3.1	4.0	1.5	1.9	2.5
Partly_Cloudy	50	10	50	DIRT_ROAD	20	0.50	0.70	0.90	1.8	2.5	3.2	1.1	1.6	2.0
Partly_Cloudy	50	10	50	DIRT_ROAD	30	0.35	0.50	0.65	1.3	1.8	2.3	0.8	1.1	1.5
Partly_Cloudy	50	10	50	DIRT_ROAD	40	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	50	10	50	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	50	10	50	LOOSE_SAND	-50	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	50	10	50	LOOSE_SAND	-40	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Partly_Cloudy	50	10	50	LOOSE_SAND	-30	0.70	0.85	1.05	2.5	3.1	3.8	1.6	1.9	2.4
Partly_Cloudy	50	10	50	LOOSE_SAND	-20	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Partly_Cloudy	50	10	50	LOOSE_SAND	-15	0.90	1.05	1.30	3.2	3.8	4.7	2.0	2.4	2.9
Partly_Cloudy	50	10	50	LOOSE_SAND	-10	1.00	1.15	1.40	3.6	4.1	5.0	2.2	2.6	3.1
Partly_Cloudy	50	10	50	LOOSE_SAND	-5	1.10	1.25	1.50	4.0	4.5	5.4	2.5	2.8	3.4
Partly_Cloudy	50	10	50	LOOSE_SAND	0	1.20	1.40	1.60	4.3	5.0	5.8	2.7	3.1	3.6
Partly_Cloudy	50	10	50	LOOSE_SAND	5	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Partly_Cloudy	50	10	50	LOOSE_SAND	10	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	50	10	50	LOOSE_SAND	15	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Partly_Cloudy	50	10	50	LOOSE_SAND	20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	50	10	50	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	50	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	50	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table G-17. Maximum Sustainable Speed, Partly Cloudy, 50% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	50	15	59	BLACK_TOP	-50	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Partly_Cloudy	50	15	59	BLACK_TOP	-40	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Partly_Cloudy	50	15	59	BLACK_TOP	-30	1.05	1.35	1.60	3.8	4.9	5.8	2.4	3.0	3.6
Partly_Cloudy	50	15	59	BLACK_TOP	-20	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Partly_Cloudy	50	15	59	BLACK_TOP	-15	1.30	1.60	1.85	4.7	5.8	6.7	2.9	3.6	4.1
Partly_Cloudy	50	15	59	BLACK_TOP	-10	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Partly_Cloudy	50	15	59	BLACK_TOP	-5	1.50	1.80	2.05	5.4	6.5	7.4	3.4	4.0	4.6
Partly_Cloudy	50	15	59	BLACK_TOP	0	1.65	1.90	2.20	5.9	6.8	7.9	3.7	4.3	4.9
Partly_Cloudy	50	15	59	BLACK_TOP	5	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Partly_Cloudy	50	15	59	BLACK_TOP	10	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Partly_Cloudy	50	15	59	BLACK_TOP	15	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Partly_Cloudy	50	15	59	BLACK_TOP	20	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	50	15	59	BLACK_TOP	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	50	15	59	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	50	15	59	BLACK_TOP	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	50	15	59	DIRT_ROAD	-50	0.75	1.00	1.20	2.7	3.6	4.3	1.7	2.2	2.7
Partly_Cloudy	50	15	59	DIRT_ROAD	-40	0.85	1.10	1.35	3.1	4.0	4.9	1.9	2.5	3.0
Partly_Cloudy	50	15	59	DIRT_ROAD	-30	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Partly_Cloudy	50	15	59	DIRT_ROAD	-20	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Partly_Cloudy	50	15	59	DIRT_ROAD	-15	1.25	1.50	1.75	4.5	5.4	6.3	2.8	3.4	3.9
Partly_Cloudy	50	15	59	DIRT_ROAD	-10	1.35	1.60	1.85	4.9	5.8	6.7	3.0	3.6	4.1
Partly_Cloudy	50	15	59	DIRT_ROAD	-5	1.45	1.70	1.95	5.2	6.1	7.0	3.2	3.8	4.4
Partly_Cloudy	50	15	59	DIRT_ROAD	0	1.55	1.80	2.10	5.6	6.5	7.6	3.5	4.0	4.7
Partly_Cloudy	50	15	59	DIRT_ROAD	5	1.05	1.30	1.55	3.8	4.7	5.6	2.4	2.9	3.5
Partly_Cloudy	50	15	59	DIRT_ROAD	10	0.75	1.00	1.20	2.7	3.6	4.3	1.7	2.2	2.7
Partly_Cloudy	50	15	59	DIRT_ROAD	15	0.60	0.75	0.95	2.2	2.7	3.4	1.3	1.7	2.1
Partly_Cloudy	50	15	59	DIRT_ROAD	20	0.45	0.60	0.80	1.6	2.2	2.9	1.0	1.3	1.8
Partly_Cloudy	50	15	59	DIRT_ROAD	30	0.30	0.45	0.55	1.1	1.6	2.0	0.7	1.0	1.2
Partly_Cloudy	50	15	59	DIRT_ROAD	40	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	50	15	59	DIRT_ROAD	50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	50	15	59	LOOSE_SAND	-50	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Partly_Cloudy	50	15	59	LOOSE_SAND	-40	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	50	15	59	LOOSE_SAND	-30	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Partly_Cloudy	50	15	59	LOOSE_SAND	-20	0.75	0.90	1.10	2.7	3.2	4.0	1.7	2.0	2.5
Partly_Cloudy	50	15	59	LOOSE_SAND	-15	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Partly_Cloudy	50	15	59	LOOSE_SAND	-10	0.90	1.10	1.30	3.2	4.0	4.7	2.0	2.5	2.9
Partly_Cloudy	50	15	59	LOOSE_SAND	-5	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Partly_Cloudy	50	15	59	LOOSE_SAND	0	1.10	1.30	1.50	4.0	4.7	5.4	2.5	2.9	3.4
Partly_Cloudy	50	15	59	LOOSE_SAND	5	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Partly_Cloudy	50	15	59	LOOSE_SAND	10	0.45	0.60	0.75	1.6	2.2	2.7	1.0	1.3	1.7
Partly_Cloudy	50	15	59	LOOSE_SAND	15	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	50	15	59	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	50	15	59	LOOSE_SAND	30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	50	15	59	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	15	59	LOOSE_SAND	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3

Table G-18. Maximum Sustainable Speed, Partly Cloudy, 50% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	50	20	68	BLACK_TOP	-50	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Partly_Cloudy	50	20	68	BLACK_TOP	-40	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Partly_Cloudy	50	20	68	BLACK_TOP	-30	0.95	1.20	1.40	3.4	4.3	5.0	2.1	2.7	3.1
Partly_Cloudy	50	20	68	BLACK_TOP	-20	1.10	1.40	1.55	4.0	5.0	5.6	2.5	3.1	3.5
Partly_Cloudy	50	20	68	BLACK_TOP	-15	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Partly_Cloudy	50	20	68	BLACK_TOP	-10	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Partly_Cloudy	50	20	68	BLACK_TOP	-5	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Partly_Cloudy	50	20	68	BLACK_TOP	0	1.50	1.80	2.00	5.4	6.5	7.2	3.4	4.0	4.5
Partly_Cloudy	50	20	68	BLACK_TOP	5	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Partly_Cloudy	50	20	68	BLACK_TOP	10	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Partly_Cloudy	50	20	68	BLACK_TOP	15	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Partly_Cloudy	50	20	68	BLACK_TOP	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Partly_Cloudy	50	20	68	BLACK_TOP	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	50	20	68	BLACK_TOP	40	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	50	20	68	BLACK_TOP	50	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Partly_Cloudy	50	20	68	DIRT_ROAD	-50	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Partly_Cloudy	50	20	68	DIRT_ROAD	-40	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Partly_Cloudy	50	20	68	DIRT_ROAD	-30	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Partly_Cloudy	50	20	68	DIRT_ROAD	-20	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Partly_Cloudy	50	20	68	DIRT_ROAD	-15	1.15	1.40	1.55	4.1	5.0	5.6	2.6	3.1	3.5
Partly_Cloudy	50	20	68	DIRT_ROAD	-10	1.20	1.50	1.65	4.3	5.4	5.9	2.7	3.4	3.7
Partly_Cloudy	50	20	68	DIRT_ROAD	-5	1.35	1.60	1.75	4.9	5.8	6.3	3.0	3.6	3.9
Partly_Cloudy	50	20	68	DIRT_ROAD	0	1.45	1.70	1.90	5.2	6.1	6.8	3.2	3.8	4.3
Partly_Cloudy	50	20	68	DIRT_ROAD	5	0.95	1.20	1.40	3.4	4.3	5.0	2.1	2.7	3.1
Partly_Cloudy	50	20	68	DIRT_ROAD	10	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Partly_Cloudy	50	20	68	DIRT_ROAD	15	0.50	0.70	0.80	1.8	2.5	2.9	1.1	1.6	1.8
Partly_Cloudy	50	20	68	DIRT_ROAD	20	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Partly_Cloudy	50	20	68	DIRT_ROAD	30	0.25	0.40	0.45	0.9	1.4	1.6	0.6	0.9	1.0
Partly_Cloudy	50	20	68	DIRT_ROAD	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	50	20	68	DIRT_ROAD	50	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	50	20	68	LOOSE_SAND	-50	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	50	20	68	LOOSE_SAND	-40	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Partly_Cloudy	50	20	68	LOOSE_SAND	-30	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Partly_Cloudy	50	20	68	LOOSE_SAND	-20	0.65	0.85	0.95	2.3	3.1	3.4	1.5	1.9	2.1
Partly_Cloudy	50	20	68	LOOSE_SAND	-15	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Partly_Cloudy	50	20	68	LOOSE_SAND	-10	0.85	1.00	1.15	3.1	3.6	4.1	1.9	2.2	2.6
Partly_Cloudy	50	20	68	LOOSE_SAND	-5	0.90	1.10	1.25	3.2	4.0	4.5	2.0	2.5	2.8
Partly_Cloudy	50	20	68	LOOSE_SAND	0	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Partly_Cloudy	50	20	68	LOOSE_SAND	5	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Partly_Cloudy	50	20	68	LOOSE_SAND	10	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	50	20	68	LOOSE_SAND	15	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	50	20	68	LOOSE_SAND	20	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	50	20	68	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	50	20	68	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	20	68	LOOSE_SAND	50	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3

Table G-19. Maximum Sustainable Speed, Partly Cloudy, 50% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	50	25	77	BLACK_TOP	-50	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Partly_Cloudy	50	25	77	BLACK_TOP	-40	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Partly_Cloudy	50	25	77	BLACK_TOP	-30	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Partly_Cloudy	50	25	77	BLACK_TOP	-20	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Partly_Cloudy	50	25	77	BLACK_TOP	-15	1.10	1.25	1.45	4.0	4.5	5.2	2.5	2.8	3.2
Partly_Cloudy	50	25	77	BLACK_TOP	-10	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Partly_Cloudy	50	25	77	BLACK_TOP	-5	1.30	1.45	1.65	4.7	5.2	5.9	2.9	3.2	3.7
Partly_Cloudy	50	25	77	BLACK_TOP	0	1.40	1.60	1.75	5.0	5.8	6.3	3.1	3.6	3.9
Partly_Cloudy	50	25	77	BLACK_TOP	5	0.90	1.10	1.25	3.2	4.0	4.5	2.0	2.5	2.8
Partly_Cloudy	50	25	77	BLACK_TOP	10	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Partly_Cloudy	50	25	77	BLACK_TOP	15	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Partly_Cloudy	50	25	77	BLACK_TOP	20	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Partly_Cloudy	50	25	77	BLACK_TOP	30	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Partly_Cloudy	50	25	77	BLACK_TOP	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	50	25	77	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	50	25	77	DIRT_ROAD	-50	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Partly_Cloudy	50	25	77	DIRT_ROAD	-40	0.70	0.85	0.95	2.5	3.1	3.4	1.6	1.9	2.1
Partly_Cloudy	50	25	77	DIRT_ROAD	-30	0.80	0.95	1.10	2.9	3.4	4.0	1.8	2.1	2.5
Partly_Cloudy	50	25	77	DIRT_ROAD	-20	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Partly_Cloudy	50	25	77	DIRT_ROAD	-15	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Partly_Cloudy	50	25	77	DIRT_ROAD	-10	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Partly_Cloudy	50	25	77	DIRT_ROAD	-5	1.20	1.40	1.55	4.3	5.0	5.6	2.7	3.1	3.5
Partly_Cloudy	50	25	77	DIRT_ROAD	0	1.30	1.50	1.65	4.7	5.4	5.9	2.9	3.4	3.7
Partly_Cloudy	50	25	77	DIRT_ROAD	5	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Partly_Cloudy	50	25	77	DIRT_ROAD	10	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Partly_Cloudy	50	25	77	DIRT_ROAD	15	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	50	25	77	DIRT_ROAD	20	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Partly_Cloudy	50	25	77	DIRT_ROAD	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	50	25	77	DIRT_ROAD	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	50	25	77	DIRT_ROAD	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Partly_Cloudy	50	25	77	LOOSE_SAND	-50	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Partly_Cloudy	50	25	77	LOOSE_SAND	-40	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	50	25	77	LOOSE_SAND	-30	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Partly_Cloudy	50	25	77	LOOSE_SAND	-20	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Partly_Cloudy	50	25	77	LOOSE_SAND	-15	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Partly_Cloudy	50	25	77	LOOSE_SAND	-10	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Partly_Cloudy	50	25	77	LOOSE_SAND	-5	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Partly_Cloudy	50	25	77	LOOSE_SAND	0	0.95	1.10	1.20	3.4	4.0	4.3	2.1	2.5	2.7
Partly_Cloudy	50	25	77	LOOSE_SAND	5	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Partly_Cloudy	50	25	77	LOOSE_SAND	10	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Partly_Cloudy	50	25	77	LOOSE_SAND	15	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	50	25	77	LOOSE_SAND	20	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	50	25	77	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	25	77	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	50	25	77	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table G-20. Maximum Sustainable Speed, Partly Cloudy, 50% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	50	30	86	BLACK_TOP	-50	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Partly_Cloudy	50	30	86	BLACK_TOP	-40	0.55	0.65	0.80	2.0	2.3	2.9	1.2	1.5	1.8
Partly_Cloudy	50	30	86	BLACK_TOP	-30	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Partly_Cloudy	50	30	86	BLACK_TOP	-20	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Partly_Cloudy	50	30	86	BLACK_TOP	-15	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Partly_Cloudy	50	30	86	BLACK_TOP	-10	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Partly_Cloudy	50	30	86	BLACK_TOP	-5	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Partly_Cloudy	50	30	86	BLACK_TOP	0	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Partly_Cloudy	50	30	86	BLACK_TOP	5	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Partly_Cloudy	50	30	86	BLACK_TOP	10	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Partly_Cloudy	50	30	86	BLACK_TOP	15	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Partly_Cloudy	50	30	86	BLACK_TOP	20	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Partly_Cloudy	50	30	86	BLACK_TOP	30	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Partly_Cloudy	50	30	86	BLACK_TOP	40	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Partly_Cloudy	50	30	86	BLACK_TOP	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	50	30	86	DIRT_ROAD	-50	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	50	30	86	DIRT_ROAD	-40	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Partly_Cloudy	50	30	86	DIRT_ROAD	-30	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Partly_Cloudy	50	30	86	DIRT_ROAD	-20	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Partly_Cloudy	50	30	86	DIRT_ROAD	-15	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Partly_Cloudy	50	30	86	DIRT_ROAD	-10	0.90	1.05	1.15	3.2	3.8	4.1	2.0	2.4	2.6
Partly_Cloudy	50	30	86	DIRT_ROAD	-5	1.00	1.15	1.25	3.6	4.1	4.5	2.2	2.6	2.8
Partly_Cloudy	50	30	86	DIRT_ROAD	0	1.15	1.25	1.40	4.1	4.5	5.0	2.6	2.8	3.1
Partly_Cloudy	50	30	86	DIRT_ROAD	5	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Partly_Cloudy	50	30	86	DIRT_ROAD	10	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	50	30	86	DIRT_ROAD	15	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Partly_Cloudy	50	30	86	DIRT_ROAD	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	50	30	86	DIRT_ROAD	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	50	30	86	DIRT_ROAD	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	30	86	DIRT_ROAD	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	50	30	86	LOOSE_SAND	-50	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	50	30	86	LOOSE_SAND	-40	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	50	30	86	LOOSE_SAND	-30	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Partly_Cloudy	50	30	86	LOOSE_SAND	-20	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	50	30	86	LOOSE_SAND	-15	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Partly_Cloudy	50	30	86	LOOSE_SAND	-10	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Partly_Cloudy	50	30	86	LOOSE_SAND	-5	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Partly_Cloudy	50	30	86	LOOSE_SAND	0	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Partly_Cloudy	50	30	86	LOOSE_SAND	5	0.40	0.50	0.55	1.4	1.8	2.0	0.9	1.1	1.2
Partly_Cloudy	50	30	86	LOOSE_SAND	10	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	50	30	86	LOOSE_SAND	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	50	30	86	LOOSE_SAND	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	30	86	LOOSE_SAND	30	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Partly_Cloudy	50	30	86	LOOSE_SAND	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	50	30	86	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table G-21. Maximum Sustainable Speed, Partly Cloudy, 50% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	50	35	95	BLACK_TOP	-50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	50	35	95	BLACK_TOP	-40	0.30	0.35	0.50	1.1	1.3	1.8	0.7	0.8	1.1
Partly_Cloudy	50	35	95	BLACK_TOP	-30	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Partly_Cloudy	50	35	95	BLACK_TOP	-20	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Partly_Cloudy	50	35	95	BLACK_TOP	-15	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Partly_Cloudy	50	35	95	BLACK_TOP	-10	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Partly_Cloudy	50	35	95	BLACK_TOP	-5	0.70	0.75	0.95	2.5	2.7	3.4	1.6	1.7	2.1
Partly_Cloudy	50	35	95	BLACK_TOP	0	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Partly_Cloudy	50	35	95	BLACK_TOP	5	0.40	0.45	0.65	1.4	1.6	2.3	0.9	1.0	1.5
Partly_Cloudy	50	35	95	BLACK_TOP	10	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	50	35	95	BLACK_TOP	15	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	50	35	95	BLACK_TOP	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	35	95	BLACK_TOP	30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	50	35	95	BLACK_TOP	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	50	35	95	BLACK_TOP	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	50	35	95	DIRT_ROAD	-50	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	50	35	95	DIRT_ROAD	-40	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	50	35	95	DIRT_ROAD	-30	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	50	35	95	DIRT_ROAD	-20	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Partly_Cloudy	50	35	95	DIRT_ROAD	-15	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Partly_Cloudy	50	35	95	DIRT_ROAD	-10	0.55	0.65	0.80	2.0	2.3	2.9	1.2	1.5	1.8
Partly_Cloudy	50	35	95	DIRT_ROAD	-5	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Partly_Cloudy	50	35	95	DIRT_ROAD	0	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Partly_Cloudy	50	35	95	DIRT_ROAD	5	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	50	35	95	DIRT_ROAD	10	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	50	35	95	DIRT_ROAD	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	50	35	95	DIRT_ROAD	20	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	35	95	DIRT_ROAD	30	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	50	35	95	DIRT_ROAD	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	50	35	95	DIRT_ROAD	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Partly_Cloudy	50	35	95	LOOSE_SAND	-50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	35	95	LOOSE_SAND	-40	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Partly_Cloudy	50	35	95	LOOSE_SAND	-30	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	50	35	95	LOOSE_SAND	-20	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	50	35	95	LOOSE_SAND	-15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	50	35	95	LOOSE_SAND	-10	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Partly_Cloudy	50	35	95	LOOSE_SAND	-5	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Partly_Cloudy	50	35	95	LOOSE_SAND	0	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Partly_Cloudy	50	35	95	LOOSE_SAND	5	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	50	35	95	LOOSE_SAND	10	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	50	35	95	LOOSE_SAND	15	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	50	35	95	LOOSE_SAND	20	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	50	35	95	LOOSE_SAND	30	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Partly_Cloudy	50	35	95	LOOSE_SAND	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	50	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table G-22. Maximum Sustainable Speed, Partly Cloudy, 75% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	75	5	41	BLACK_TOP	-50	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	75	5	41	BLACK_TOP	-40	1.10	1.35	1.75	4.0	4.9	6.3	2.5	3.0	3.9
Partly_Cloudy	75	5	41	BLACK_TOP	-30	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	75	5	41	BLACK_TOP	-20	1.40	1.70	2.10	5.0	6.1	7.6	3.1	3.8	4.7
Partly_Cloudy	75	5	41	BLACK_TOP	-15	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Partly_Cloudy	75	5	41	BLACK_TOP	-10	1.60	1.90	2.30	5.8	6.8	8.3	3.6	4.3	5.2
Partly_Cloudy	75	5	41	BLACK_TOP	-5	1.70	2.00	2.40	6.1	7.2	8.6	3.8	4.5	5.4
Partly_Cloudy	75	5	41	BLACK_TOP	0	1.85	2.10	2.50	6.7	7.6	9.0	4.1	4.7	5.6
Partly_Cloudy	75	5	41	BLACK_TOP	5	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	75	5	41	BLACK_TOP	10	1.00	1.25	1.60	3.6	4.5	5.8	2.2	2.8	3.6
Partly_Cloudy	75	5	41	BLACK_TOP	15	0.75	1.00	1.30	2.7	3.6	4.7	1.7	2.2	2.9
Partly_Cloudy	75	5	41	BLACK_TOP	20	0.60	0.80	1.10	2.2	2.9	4.0	1.3	1.8	2.5
Partly_Cloudy	75	5	41	BLACK_TOP	30	0.45	0.55	0.80	1.6	2.0	2.9	1.0	1.2	1.8
Partly_Cloudy	75	5	41	BLACK_TOP	40	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Partly_Cloudy	75	5	41	BLACK_TOP	50	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	75	5	41	DIRT_ROAD	-50	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	75	5	41	DIRT_ROAD	-40	1.05	1.25	1.65	3.8	4.5	5.9	2.4	2.8	3.7
Partly_Cloudy	75	5	41	DIRT_ROAD	-30	1.20	1.40	1.80	4.3	5.0	6.5	2.7	3.1	4.0
Partly_Cloudy	75	5	41	DIRT_ROAD	-20	1.35	1.60	2.00	4.9	5.8	7.2	3.0	3.6	4.5
Partly_Cloudy	75	5	41	DIRT_ROAD	-15	1.45	1.70	2.10	5.2	6.1	7.6	3.2	3.8	4.7
Partly_Cloudy	75	5	41	DIRT_ROAD	-10	1.50	1.80	2.20	5.4	6.5	7.9	3.4	4.0	4.9
Partly_Cloudy	75	5	41	DIRT_ROAD	-5	1.65	1.90	2.30	5.9	6.8	8.3	3.7	4.3	5.2
Partly_Cloudy	75	5	41	DIRT_ROAD	0	1.75	2.00	2.40	6.3	7.2	8.6	3.9	4.5	5.4
Partly_Cloudy	75	5	41	DIRT_ROAD	5	1.25	1.50	1.90	4.5	5.4	6.8	2.8	3.4	4.3
Partly_Cloudy	75	5	41	DIRT_ROAD	10	0.95	1.15	1.50	3.4	4.1	5.4	2.1	2.6	3.4
Partly_Cloudy	75	5	41	DIRT_ROAD	15	0.70	0.90	1.20	2.5	3.2	4.3	1.6	2.0	2.7
Partly_Cloudy	75	5	41	DIRT_ROAD	20	0.55	0.75	1.00	2.0	2.7	3.6	1.2	1.7	2.2
Partly_Cloudy	75	5	41	DIRT_ROAD	30	0.40	0.50	0.75	1.4	1.8	2.7	0.9	1.1	1.7
Partly_Cloudy	75	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	75	5	41	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	75	5	41	LOOSE_SAND	-50	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	75	5	41	LOOSE_SAND	-40	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Partly_Cloudy	75	5	41	LOOSE_SAND	-30	0.75	0.90	1.15	2.7	3.2	4.1	1.7	2.0	2.6
Partly_Cloudy	75	5	41	LOOSE_SAND	-20	0.85	1.05	1.35	3.1	3.8	4.9	1.9	2.4	3.0
Partly_Cloudy	75	5	41	LOOSE_SAND	-15	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Partly_Cloudy	75	5	41	LOOSE_SAND	-10	1.05	1.25	1.50	3.8	4.5	5.4	2.4	2.8	3.4
Partly_Cloudy	75	5	41	LOOSE_SAND	-5	1.15	1.35	1.60	4.1	4.9	5.8	2.6	3.0	3.6
Partly_Cloudy	75	5	41	LOOSE_SAND	0	1.25	1.45	1.75	4.5	5.2	6.3	2.8	3.2	3.9
Partly_Cloudy	75	5	41	LOOSE_SAND	5	0.80	0.95	1.25	2.9	3.4	4.5	1.8	2.1	2.8
Partly_Cloudy	75	5	41	LOOSE_SAND	10	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	75	5	41	LOOSE_SAND	15	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Partly_Cloudy	75	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	75	5	41	LOOSE_SAND	30	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	75	5	41	LOOSE_SAND	40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	75	5	41	LOOSE_SAND	50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6

Table G-23. Maximum Sustainable Speed, Partly Cloudy, 75% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	75	10	50	BLACK_TOP	-50	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Partly_Cloudy	75	10	50	BLACK_TOP	-40	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Partly_Cloudy	75	10	50	BLACK_TOP	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Partly_Cloudy	75	10	50	BLACK_TOP	-20	1.30	1.60	1.90	4.7	5.8	6.8	2.9	3.6	4.3
Partly_Cloudy	75	10	50	BLACK_TOP	-15	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Partly_Cloudy	75	10	50	BLACK_TOP	-10	1.50	1.80	2.05	5.4	6.5	7.4	3.4	4.0	4.6
Partly_Cloudy	75	10	50	BLACK_TOP	-5	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Partly_Cloudy	75	10	50	BLACK_TOP	0	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Partly_Cloudy	75	10	50	BLACK_TOP	5	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Partly_Cloudy	75	10	50	BLACK_TOP	10	0.90	1.15	1.40	3.2	4.1	5.0	2.0	2.6	3.1
Partly_Cloudy	75	10	50	BLACK_TOP	15	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Partly_Cloudy	75	10	50	BLACK_TOP	20	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Partly_Cloudy	75	10	50	BLACK_TOP	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Partly_Cloudy	75	10	50	BLACK_TOP	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	75	10	50	BLACK_TOP	50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	75	10	50	DIRT_ROAD	-50	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Partly_Cloudy	75	10	50	DIRT_ROAD	-40	0.95	1.20	1.45	3.4	4.3	5.2	2.1	2.7	3.2
Partly_Cloudy	75	10	50	DIRT_ROAD	-30	1.10	1.35	1.60	4.0	4.9	5.8	2.5	3.0	3.6
Partly_Cloudy	75	10	50	DIRT_ROAD	-20	1.25	1.50	1.75	4.5	5.4	6.3	2.8	3.4	3.9
Partly_Cloudy	75	10	50	DIRT_ROAD	-15	1.35	1.60	1.85	4.9	5.8	6.7	3.0	3.6	4.1
Partly_Cloudy	75	10	50	DIRT_ROAD	-10	1.40	1.70	1.95	5.0	6.1	7.0	3.1	3.8	4.4
Partly_Cloudy	75	10	50	DIRT_ROAD	-5	1.55	1.80	2.05	5.6	6.5	7.4	3.5	4.0	4.6
Partly_Cloudy	75	10	50	DIRT_ROAD	0	1.65	1.90	2.20	5.9	6.8	7.9	3.7	4.3	4.9
Partly_Cloudy	75	10	50	DIRT_ROAD	5	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Partly_Cloudy	75	10	50	DIRT_ROAD	10	0.85	1.05	1.30	3.1	3.8	4.7	1.9	2.4	2.9
Partly_Cloudy	75	10	50	DIRT_ROAD	15	0.65	0.85	1.05	2.3	3.1	3.8	1.5	1.9	2.4
Partly_Cloudy	75	10	50	DIRT_ROAD	20	0.50	0.65	0.85	1.8	2.3	3.1	1.1	1.5	1.9
Partly_Cloudy	75	10	50	DIRT_ROAD	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	75	10	50	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	75	10	50	DIRT_ROAD	50	0.20	0.30	0.40	0.7	1.1	1.4	0.4	0.7	0.9
Partly_Cloudy	75	10	50	LOOSE_SAND	-50	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Partly_Cloudy	75	10	50	LOOSE_SAND	-40	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	75	10	50	LOOSE_SAND	-30	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Partly_Cloudy	75	10	50	LOOSE_SAND	-20	0.80	1.00	1.20	2.9	3.6	4.3	1.8	2.2	2.7
Partly_Cloudy	75	10	50	LOOSE_SAND	-15	0.90	1.05	1.25	3.2	3.8	4.5	2.0	2.4	2.8
Partly_Cloudy	75	10	50	LOOSE_SAND	-10	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Partly_Cloudy	75	10	50	LOOSE_SAND	-5	1.05	1.25	1.45	3.8	4.5	5.2	2.4	2.8	3.2
Partly_Cloudy	75	10	50	LOOSE_SAND	0	1.20	1.35	1.60	4.3	4.9	5.8	2.7	3.0	3.6
Partly_Cloudy	75	10	50	LOOSE_SAND	5	0.75	0.90	1.10	2.7	3.2	4.0	1.7	2.0	2.5
Partly_Cloudy	75	10	50	LOOSE_SAND	10	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Partly_Cloudy	75	10	50	LOOSE_SAND	15	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	75	10	50	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	75	10	50	LOOSE_SAND	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	75	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	75	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table G-24. Maximum Sustainable Speed, Partly Cloudy, 75% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	75	15	59	BLACK_TOP	-50	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Partly_Cloudy	75	15	59	BLACK_TOP	-40	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Partly_Cloudy	75	15	59	BLACK_TOP	-30	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Partly_Cloudy	75	15	59	BLACK_TOP	-20	1.20	1.45	1.65	4.3	5.2	5.9	2.7	3.2	3.7
Partly_Cloudy	75	15	59	BLACK_TOP	-15	1.30	1.55	1.75	4.7	5.6	6.3	2.9	3.5	3.9
Partly_Cloudy	75	15	59	BLACK_TOP	-10	1.40	1.65	1.85	5.0	5.9	6.7	3.1	3.7	4.1
Partly_Cloudy	75	15	59	BLACK_TOP	-5	1.50	1.75	1.95	5.4	6.3	7.0	3.4	3.9	4.4
Partly_Cloudy	75	15	59	BLACK_TOP	0	1.60	1.90	2.10	5.8	6.8	7.6	3.6	4.3	4.7
Partly_Cloudy	75	15	59	BLACK_TOP	5	1.15	1.40	1.60	4.1	5.0	5.8	2.6	3.1	3.6
Partly_Cloudy	75	15	59	BLACK_TOP	10	0.80	1.05	1.20	2.9	3.8	4.3	1.8	2.4	2.7
Partly_Cloudy	75	15	59	BLACK_TOP	15	0.60	0.80	0.95	2.2	2.9	3.4	1.3	1.8	2.1
Partly_Cloudy	75	15	59	BLACK_TOP	20	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Partly_Cloudy	75	15	59	BLACK_TOP	30	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Partly_Cloudy	75	15	59	BLACK_TOP	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	75	15	59	BLACK_TOP	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	75	15	59	DIRT_ROAD	-50	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Partly_Cloudy	75	15	59	DIRT_ROAD	-40	0.85	1.10	1.25	3.1	4.0	4.5	1.9	2.5	2.8
Partly_Cloudy	75	15	59	DIRT_ROAD	-30	1.00	1.20	1.40	3.6	4.3	5.0	2.2	2.7	3.1
Partly_Cloudy	75	15	59	DIRT_ROAD	-20	1.15	1.40	1.60	4.1	5.0	5.8	2.6	3.1	3.6
Partly_Cloudy	75	15	59	DIRT_ROAD	-15	1.20	1.50	1.65	4.3	5.4	5.9	2.7	3.4	3.7
Partly_Cloudy	75	15	59	DIRT_ROAD	-10	1.30	1.60	1.75	4.7	5.8	6.3	2.9	3.6	3.9
Partly_Cloudy	75	15	59	DIRT_ROAD	-5	1.40	1.70	1.90	5.0	6.1	6.8	3.1	3.8	4.3
Partly_Cloudy	75	15	59	DIRT_ROAD	0	1.55	1.80	2.00	5.6	6.5	7.2	3.5	4.0	4.5
Partly_Cloudy	75	15	59	DIRT_ROAD	5	1.05	1.30	1.50	3.8	4.7	5.4	2.4	2.9	3.4
Partly_Cloudy	75	15	59	DIRT_ROAD	10	0.75	0.95	1.15	2.7	3.4	4.1	1.7	2.1	2.6
Partly_Cloudy	75	15	59	DIRT_ROAD	15	0.55	0.75	0.90	2.0	2.7	3.2	1.2	1.7	2.0
Partly_Cloudy	75	15	59	DIRT_ROAD	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Partly_Cloudy	75	15	59	DIRT_ROAD	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	75	15	59	DIRT_ROAD	40	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	75	15	59	DIRT_ROAD	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	75	15	59	LOOSE_SAND	-50	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Partly_Cloudy	75	15	59	LOOSE_SAND	-40	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Partly_Cloudy	75	15	59	LOOSE_SAND	-30	0.60	0.75	0.90	2.2	2.7	3.2	1.3	1.7	2.0
Partly_Cloudy	75	15	59	LOOSE_SAND	-20	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Partly_Cloudy	75	15	59	LOOSE_SAND	-15	0.80	1.00	1.10	2.9	3.6	4.0	1.8	2.2	2.5
Partly_Cloudy	75	15	59	LOOSE_SAND	-10	0.90	1.10	1.20	3.2	4.0	4.3	2.0	2.5	2.7
Partly_Cloudy	75	15	59	LOOSE_SAND	-5	1.00	1.20	1.30	3.6	4.3	4.7	2.2	2.7	2.9
Partly_Cloudy	75	15	59	LOOSE_SAND	0	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Partly_Cloudy	75	15	59	LOOSE_SAND	5	0.65	0.85	0.95	2.3	3.1	3.4	1.5	1.9	2.1
Partly_Cloudy	75	15	59	LOOSE_SAND	10	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Partly_Cloudy	75	15	59	LOOSE_SAND	15	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	75	15	59	LOOSE_SAND	20	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	75	15	59	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	75	15	59	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	75	15	59	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table G-25. Maximum Sustainable Speed, Partly Cloudy, 75% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	75	20	68	BLACK_TOP	-50	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Partly_Cloudy	75	20	68	BLACK_TOP	-40	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Partly_Cloudy	75	20	68	BLACK_TOP	-30	0.95	1.10	1.25	3.4	4.0	4.5	2.1	2.5	2.8
Partly_Cloudy	75	20	68	BLACK_TOP	-20	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Partly_Cloudy	75	20	68	BLACK_TOP	-15	1.20	1.35	1.55	4.3	4.9	5.6	2.7	3.0	3.5
Partly_Cloudy	75	20	68	BLACK_TOP	-10	1.25	1.45	1.65	4.5	5.2	5.9	2.8	3.2	3.7
Partly_Cloudy	75	20	68	BLACK_TOP	-5	1.40	1.55	1.75	5.0	5.6	6.3	3.1	3.5	3.9
Partly_Cloudy	75	20	68	BLACK_TOP	0	1.50	1.70	1.85	5.4	6.1	6.7	3.4	3.8	4.1
Partly_Cloudy	75	20	68	BLACK_TOP	5	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Partly_Cloudy	75	20	68	BLACK_TOP	10	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Partly_Cloudy	75	20	68	BLACK_TOP	15	0.55	0.65	0.80	2.0	2.3	2.9	1.2	1.5	1.8
Partly_Cloudy	75	20	68	BLACK_TOP	20	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Partly_Cloudy	75	20	68	BLACK_TOP	30	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	75	20	68	BLACK_TOP	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	75	20	68	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	75	20	68	DIRT_ROAD	-50	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Partly_Cloudy	75	20	68	DIRT_ROAD	-40	0.75	0.90	1.05	2.7	3.2	3.8	1.7	2.0	2.4
Partly_Cloudy	75	20	68	DIRT_ROAD	-30	0.90	1.05	1.20	3.2	3.8	4.3	2.0	2.4	2.7
Partly_Cloudy	75	20	68	DIRT_ROAD	-20	1.00	1.20	1.35	3.6	4.3	4.9	2.2	2.7	3.0
Partly_Cloudy	75	20	68	DIRT_ROAD	-15	1.10	1.30	1.45	4.0	4.7	5.2	2.5	2.9	3.2
Partly_Cloudy	75	20	68	DIRT_ROAD	-10	1.20	1.40	1.55	4.3	5.0	5.6	2.7	3.1	3.5
Partly_Cloudy	75	20	68	DIRT_ROAD	-5	1.30	1.50	1.65	4.7	5.4	5.9	2.9	3.4	3.7
Partly_Cloudy	75	20	68	DIRT_ROAD	0	1.40	1.60	1.75	5.0	5.8	6.3	3.1	3.6	3.9
Partly_Cloudy	75	20	68	DIRT_ROAD	5	0.95	1.15	1.25	3.4	4.1	4.5	2.1	2.6	2.8
Partly_Cloudy	75	20	68	DIRT_ROAD	10	0.65	0.80	0.95	2.3	2.9	3.4	1.5	1.8	2.1
Partly_Cloudy	75	20	68	DIRT_ROAD	15	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Partly_Cloudy	75	20	68	DIRT_ROAD	20	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	75	20	68	DIRT_ROAD	30	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Partly_Cloudy	75	20	68	DIRT_ROAD	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	75	20	68	DIRT_ROAD	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	75	20	68	LOOSE_SAND	-50	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Partly_Cloudy	75	20	68	LOOSE_SAND	-40	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	75	20	68	LOOSE_SAND	-30	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Partly_Cloudy	75	20	68	LOOSE_SAND	-20	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Partly_Cloudy	75	20	68	LOOSE_SAND	-15	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Partly_Cloudy	75	20	68	LOOSE_SAND	-10	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Partly_Cloudy	75	20	68	LOOSE_SAND	-5	0.90	1.05	1.15	3.2	3.8	4.1	2.0	2.4	2.6
Partly_Cloudy	75	20	68	LOOSE_SAND	0	1.00	1.15	1.25	3.6	4.1	4.5	2.2	2.6	2.8
Partly_Cloudy	75	20	68	LOOSE_SAND	5	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Partly_Cloudy	75	20	68	LOOSE_SAND	10	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Partly_Cloudy	75	20	68	LOOSE_SAND	15	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Partly_Cloudy	75	20	68	LOOSE_SAND	20	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	75	20	68	LOOSE_SAND	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Partly_Cloudy	75	20	68	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	75	20	68	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table G-26. Maximum Sustainable Speed, Partly Cloudy, 75% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	75	25	77	BLACK_TOP	-50	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Partly_Cloudy	75	25	77	BLACK_TOP	-40	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Partly_Cloudy	75	25	77	BLACK_TOP	-30	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Partly_Cloudy	75	25	77	BLACK_TOP	-20	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Partly_Cloudy	75	25	77	BLACK_TOP	-15	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Partly_Cloudy	75	25	77	BLACK_TOP	-10	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Partly_Cloudy	75	25	77	BLACK_TOP	-5	1.20	1.30	1.45	4.3	4.7	5.2	2.7	2.9	3.2
Partly_Cloudy	75	25	77	BLACK_TOP	0	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Partly_Cloudy	75	25	77	BLACK_TOP	5	0.85	0.95	1.05	3.1	3.4	3.8	1.9	2.1	2.4
Partly_Cloudy	75	25	77	BLACK_TOP	10	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Partly_Cloudy	75	25	77	BLACK_TOP	15	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	75	25	77	BLACK_TOP	20	0.35	0.35	0.45	1.3	1.3	1.6	0.8	0.8	1.0
Partly_Cloudy	75	25	77	BLACK_TOP	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	75	25	77	BLACK_TOP	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	75	25	77	BLACK_TOP	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	75	25	77	DIRT_ROAD	-50	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Partly_Cloudy	75	25	77	DIRT_ROAD	-40	0.60	0.70	0.80	2.2	2.5	2.9	1.3	1.6	1.8
Partly_Cloudy	75	25	77	DIRT_ROAD	-30	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Partly_Cloudy	75	25	77	DIRT_ROAD	-20	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Partly_Cloudy	75	25	77	DIRT_ROAD	-15	0.95	1.05	1.15	3.4	3.8	4.1	2.1	2.4	2.6
Partly_Cloudy	75	25	77	DIRT_ROAD	-10	1.05	1.10	1.25	3.8	4.0	4.5	2.4	2.5	2.8
Partly_Cloudy	75	25	77	DIRT_ROAD	-5	1.15	1.20	1.35	4.1	4.3	4.9	2.6	2.7	3.0
Partly_Cloudy	75	25	77	DIRT_ROAD	0	1.25	1.35	1.50	4.5	4.9	5.4	2.8	3.0	3.4
Partly_Cloudy	75	25	77	DIRT_ROAD	5	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Partly_Cloudy	75	25	77	DIRT_ROAD	10	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Partly_Cloudy	75	25	77	DIRT_ROAD	15	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Partly_Cloudy	75	25	77	DIRT_ROAD	20	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Partly_Cloudy	75	25	77	DIRT_ROAD	30	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	75	25	77	DIRT_ROAD	40	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Partly_Cloudy	75	25	77	DIRT_ROAD	50	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Partly_Cloudy	75	25	77	LOOSE_SAND	-50	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Partly_Cloudy	75	25	77	LOOSE_SAND	-40	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Partly_Cloudy	75	25	77	LOOSE_SAND	-30	0.45	0.50	0.55	1.6	1.8	2.0	1.0	1.1	1.2
Partly_Cloudy	75	25	77	LOOSE_SAND	-20	0.55	0.60	0.70	2.0	2.2	2.5	1.2	1.3	1.6
Partly_Cloudy	75	25	77	LOOSE_SAND	-15	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Partly_Cloudy	75	25	77	LOOSE_SAND	-10	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Partly_Cloudy	75	25	77	LOOSE_SAND	-5	0.80	0.85	0.95	2.9	3.1	3.4	1.8	1.9	2.1
Partly_Cloudy	75	25	77	LOOSE_SAND	0	0.90	0.95	1.05	3.2	3.4	3.8	2.0	2.1	2.4
Partly_Cloudy	75	25	77	LOOSE_SAND	5	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Partly_Cloudy	75	25	77	LOOSE_SAND	10	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Partly_Cloudy	75	25	77	LOOSE_SAND	15	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	75	25	77	LOOSE_SAND	20	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Partly_Cloudy	75	25	77	LOOSE_SAND	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	75	25	77	LOOSE_SAND	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Partly_Cloudy	75	25	77	LOOSE_SAND	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2

Table G-27. Maximum Sustainable Speed, Partly Cloudy, 75% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	75	30	86	BLACK_TOP	-50	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	75	30	86	BLACK_TOP	-40	0.35	0.40	0.55	1.3	1.4	2.0	0.8	0.9	1.2
Partly_Cloudy	75	30	86	BLACK_TOP	-30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Partly_Cloudy	75	30	86	BLACK_TOP	-20	0.55	0.60	0.80	2.0	2.2	2.9	1.2	1.3	1.8
Partly_Cloudy	75	30	86	BLACK_TOP	-15	0.60	0.70	0.85	2.2	2.5	3.1	1.3	1.6	1.9
Partly_Cloudy	75	30	86	BLACK_TOP	-10	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Partly_Cloudy	75	30	86	BLACK_TOP	-5	0.80	0.85	1.05	2.9	3.1	3.8	1.8	1.9	2.4
Partly_Cloudy	75	30	86	BLACK_TOP	0	0.90	1.00	1.15	3.2	3.6	4.1	2.0	2.2	2.6
Partly_Cloudy	75	30	86	BLACK_TOP	5	0.45	0.55	0.70	1.6	2.0	2.5	1.0	1.2	1.6
Partly_Cloudy	75	30	86	BLACK_TOP	10	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	75	30	86	BLACK_TOP	15	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	75	30	86	BLACK_TOP	20	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	75	30	86	BLACK_TOP	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	75	30	86	BLACK_TOP	40	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Partly_Cloudy	75	30	86	BLACK_TOP	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	75	30	86	DIRT_ROAD	-50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	75	30	86	DIRT_ROAD	-40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	75	30	86	DIRT_ROAD	-30	0.40	0.45	0.60	1.4	1.6	2.2	0.9	1.0	1.3
Partly_Cloudy	75	30	86	DIRT_ROAD	-20	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Partly_Cloudy	75	30	86	DIRT_ROAD	-15	0.55	0.65	0.80	2.0	2.3	2.9	1.2	1.5	1.8
Partly_Cloudy	75	30	86	DIRT_ROAD	-10	0.65	0.75	0.90	2.3	2.7	3.2	1.5	1.7	2.0
Partly_Cloudy	75	30	86	DIRT_ROAD	-5	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Partly_Cloudy	75	30	86	DIRT_ROAD	0	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Partly_Cloudy	75	30	86	DIRT_ROAD	5	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Partly_Cloudy	75	30	86	DIRT_ROAD	10	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	75	30	86	DIRT_ROAD	15	0.20	0.20	0.30	0.7	0.7	1.1	0.4	0.4	0.7
Partly_Cloudy	75	30	86	DIRT_ROAD	20	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Partly_Cloudy	75	30	86	DIRT_ROAD	30	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	75	30	86	DIRT_ROAD	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	75	30	86	DIRT_ROAD	50	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	75	30	86	LOOSE_SAND	-50	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Partly_Cloudy	75	30	86	LOOSE_SAND	-40	0.15	0.20	0.30	0.5	0.7	1.1	0.3	0.4	0.7
Partly_Cloudy	75	30	86	LOOSE_SAND	-30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	75	30	86	LOOSE_SAND	-20	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	75	30	86	LOOSE_SAND	-15	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Partly_Cloudy	75	30	86	LOOSE_SAND	-10	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	75	30	86	LOOSE_SAND	-5	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Partly_Cloudy	75	30	86	LOOSE_SAND	0	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Partly_Cloudy	75	30	86	LOOSE_SAND	5	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	75	30	86	LOOSE_SAND	10	0.15	0.15	0.25	0.5	0.5	0.9	0.3	0.3	0.6
Partly_Cloudy	75	30	86	LOOSE_SAND	15	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	75	30	86	LOOSE_SAND	20	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Partly_Cloudy	75	30	86	LOOSE_SAND	30	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1
Partly_Cloudy	75	30	86	LOOSE_SAND	40	0.00	0.05	0.05	0.0	0.2	0.2	0.0	0.1	0.1
Partly_Cloudy	75	30	86	LOOSE_SAND	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1

Table G-28. Maximum Sustainable Speed, Partly Cloudy, 75% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	75	35	95	BLACK_TOP	-50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	BLACK_TOP	-40	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Partly_Cloudy	75	35	95	BLACK_TOP	-30	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Partly_Cloudy	75	35	95	BLACK_TOP	-20	0.00	0.00	0.20	0.0	0.0	0.7	0.0	0.0	0.4
Partly_Cloudy	75	35	95	BLACK_TOP	-15	0.00	0.00	0.25	0.0	0.0	0.9	0.0	0.0	0.6
Partly_Cloudy	75	35	95	BLACK_TOP	-10	0.00	0.00	0.30	0.0	0.0	1.1	0.0	0.0	0.7
Partly_Cloudy	75	35	95	BLACK_TOP	-5	0.00	0.00	0.35	0.0	0.0	1.3	0.0	0.0	0.8
Partly_Cloudy	75	35	95	BLACK_TOP	0	0.00	0.00	0.45	0.0	0.0	1.6	0.0	0.0	1.0
Partly_Cloudy	75	35	95	BLACK_TOP	5	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Partly_Cloudy	75	35	95	BLACK_TOP	10	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	BLACK_TOP	15	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	BLACK_TOP	20	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	BLACK_TOP	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	BLACK_TOP	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	BLACK_TOP	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	DIRT_ROAD	-50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	DIRT_ROAD	-40	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Partly_Cloudy	75	35	95	DIRT_ROAD	-30	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Partly_Cloudy	75	35	95	DIRT_ROAD	-20	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Partly_Cloudy	75	35	95	DIRT_ROAD	-15	0.00	0.00	0.20	0.0	0.0	0.7	0.0	0.0	0.4
Partly_Cloudy	75	35	95	DIRT_ROAD	-10	0.00	0.00	0.25	0.0	0.0	0.9	0.0	0.0	0.6
Partly_Cloudy	75	35	95	DIRT_ROAD	-5	0.00	0.00	0.35	0.0	0.0	1.3	0.0	0.0	0.8
Partly_Cloudy	75	35	95	DIRT_ROAD	0	0.00	0.00	0.45	0.0	0.0	1.6	0.0	0.0	1.0
Partly_Cloudy	75	35	95	DIRT_ROAD	5	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Partly_Cloudy	75	35	95	DIRT_ROAD	10	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	DIRT_ROAD	15	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	DIRT_ROAD	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	DIRT_ROAD	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	DIRT_ROAD	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	DIRT_ROAD	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	LOOSE_SAND	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	LOOSE_SAND	-40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	LOOSE_SAND	-30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	LOOSE_SAND	-20	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Partly_Cloudy	75	35	95	LOOSE_SAND	-15	0.00	0.00	0.10	0.0	0.0	0.4	0.0	0.0	0.2
Partly_Cloudy	75	35	95	LOOSE_SAND	-10	0.00	0.00	0.15	0.0	0.0	0.5	0.0	0.0	0.3
Partly_Cloudy	75	35	95	LOOSE_SAND	-5	0.00	0.00	0.20	0.0	0.0	0.7	0.0	0.0	0.4
Partly_Cloudy	75	35	95	LOOSE_SAND	0	0.00	0.00	0.30	0.0	0.0	1.1	0.0	0.0	0.7
Partly_Cloudy	75	35	95	LOOSE_SAND	5	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	75	35	95	LOOSE_SAND	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	LOOSE_SAND	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	LOOSE_SAND	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	75	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table G-29. Maximum Sustainable Speed, Partly Cloudy, 95% Humidity, 5°C (41°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	95	5	41	BLACK_TOP	-50	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Partly_Cloudy	95	5	41	BLACK_TOP	-40	1.10	1.35	1.65	4.0	4.9	5.9	2.5	3.0	3.7
Partly_Cloudy	95	5	41	BLACK_TOP	-30	1.25	1.50	1.85	4.5	5.4	6.7	2.8	3.4	4.1
Partly_Cloudy	95	5	41	BLACK_TOP	-20	1.40	1.70	2.00	5.0	6.1	7.2	3.1	3.8	4.5
Partly_Cloudy	95	5	41	BLACK_TOP	-15	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Partly_Cloudy	95	5	41	BLACK_TOP	-10	1.60	1.85	2.20	5.8	6.7	7.9	3.6	4.1	4.9
Partly_Cloudy	95	5	41	BLACK_TOP	-5	1.70	2.00	2.30	6.1	7.2	8.3	3.8	4.5	5.2
Partly_Cloudy	95	5	41	BLACK_TOP	0	1.80	2.10	2.45	6.5	7.6	8.8	4.0	4.7	5.5
Partly_Cloudy	95	5	41	BLACK_TOP	5	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Partly_Cloudy	95	5	41	BLACK_TOP	10	1.00	1.25	1.55	3.6	4.5	5.6	2.2	2.8	3.5
Partly_Cloudy	95	5	41	BLACK_TOP	15	0.75	0.95	1.25	2.7	3.4	4.5	1.7	2.1	2.8
Partly_Cloudy	95	5	41	BLACK_TOP	20	0.60	0.80	1.05	2.2	2.9	3.8	1.3	1.8	2.4
Partly_Cloudy	95	5	41	BLACK_TOP	30	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Partly_Cloudy	95	5	41	BLACK_TOP	40	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	95	5	41	BLACK_TOP	50	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	95	5	41	DIRT_ROAD	-50	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Partly_Cloudy	95	5	41	DIRT_ROAD	-40	1.05	1.25	1.55	3.8	4.5	5.6	2.4	2.8	3.5
Partly_Cloudy	95	5	41	DIRT_ROAD	-30	1.15	1.40	1.70	4.1	5.0	6.1	2.6	3.1	3.8
Partly_Cloudy	95	5	41	DIRT_ROAD	-20	1.35	1.60	1.90	4.9	5.8	6.8	3.0	3.6	4.3
Partly_Cloudy	95	5	41	DIRT_ROAD	-15	1.40	1.65	2.00	5.0	5.9	7.2	3.1	3.7	4.5
Partly_Cloudy	95	5	41	DIRT_ROAD	-10	1.50	1.75	2.10	5.4	6.3	7.6	3.4	3.9	4.7
Partly_Cloudy	95	5	41	DIRT_ROAD	-5	1.60	1.90	2.20	5.8	6.8	7.9	3.6	4.3	4.9
Partly_Cloudy	95	5	41	DIRT_ROAD	0	1.75	2.00	2.30	6.3	7.2	8.3	3.9	4.5	5.2
Partly_Cloudy	95	5	41	DIRT_ROAD	5	1.25	1.50	1.80	4.5	5.4	6.5	2.8	3.4	4.0
Partly_Cloudy	95	5	41	DIRT_ROAD	10	0.90	1.15	1.45	3.2	4.1	5.2	2.0	2.6	3.2
Partly_Cloudy	95	5	41	DIRT_ROAD	15	0.70	0.90	1.15	2.5	3.2	4.1	1.6	2.0	2.6
Partly_Cloudy	95	5	41	DIRT_ROAD	20	0.55	0.75	0.95	2.0	2.7	3.4	1.2	1.7	2.1
Partly_Cloudy	95	5	41	DIRT_ROAD	30	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Partly_Cloudy	95	5	41	DIRT_ROAD	40	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	95	5	41	DIRT_ROAD	50	0.25	0.30	0.45	0.9	1.1	1.6	0.6	0.7	1.0
Partly_Cloudy	95	5	41	LOOSE_SAND	-50	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Partly_Cloudy	95	5	41	LOOSE_SAND	-40	0.60	0.80	1.00	2.2	2.9	3.6	1.3	1.8	2.2
Partly_Cloudy	95	5	41	LOOSE_SAND	-30	0.75	0.90	1.10	2.7	3.2	4.0	1.7	2.0	2.5
Partly_Cloudy	95	5	41	LOOSE_SAND	-20	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Partly_Cloudy	95	5	41	LOOSE_SAND	-15	0.95	1.15	1.35	3.4	4.1	4.9	2.1	2.6	3.0
Partly_Cloudy	95	5	41	LOOSE_SAND	-10	1.05	1.20	1.45	3.8	4.3	5.2	2.4	2.7	3.2
Partly_Cloudy	95	5	41	LOOSE_SAND	-5	1.15	1.30	1.55	4.1	4.7	5.6	2.6	2.9	3.5
Partly_Cloudy	95	5	41	LOOSE_SAND	0	1.25	1.45	1.65	4.5	5.2	5.9	2.8	3.2	3.7
Partly_Cloudy	95	5	41	LOOSE_SAND	5	0.80	0.95	1.20	2.9	3.4	4.3	1.8	2.1	2.7
Partly_Cloudy	95	5	41	LOOSE_SAND	10	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Partly_Cloudy	95	5	41	LOOSE_SAND	15	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Partly_Cloudy	95	5	41	LOOSE_SAND	20	0.30	0.40	0.55	1.1	1.4	2.0	0.7	0.9	1.2
Partly_Cloudy	95	5	41	LOOSE_SAND	30	0.20	0.25	0.35	0.7	0.9	1.3	0.4	0.6	0.8
Partly_Cloudy	95	5	41	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	95	5	41	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table G-30. Maximum Sustainable Speed, Partly Cloudy, 95% Humidity, 10°C (50°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	95	10	50	BLACK_TOP	-50	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Partly_Cloudy	95	10	50	BLACK_TOP	-40	1.00	1.25	1.50	3.6	4.5	5.4	2.2	2.8	3.4
Partly_Cloudy	95	10	50	BLACK_TOP	-30	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Partly_Cloudy	95	10	50	BLACK_TOP	-20	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Partly_Cloudy	95	10	50	BLACK_TOP	-15	1.40	1.65	1.90	5.0	5.9	6.8	3.1	3.7	4.3
Partly_Cloudy	95	10	50	BLACK_TOP	-10	1.50	1.75	2.00	5.4	6.3	7.2	3.4	3.9	4.5
Partly_Cloudy	95	10	50	BLACK_TOP	-5	1.60	1.85	2.15	5.8	6.7	7.7	3.6	4.1	4.8
Partly_Cloudy	95	10	50	BLACK_TOP	0	1.70	2.00	2.25	6.1	7.2	8.1	3.8	4.5	5.0
Partly_Cloudy	95	10	50	BLACK_TOP	5	1.20	1.50	1.75	4.3	5.4	6.3	2.7	3.4	3.9
Partly_Cloudy	95	10	50	BLACK_TOP	10	0.90	1.15	1.35	3.2	4.1	4.9	2.0	2.6	3.0
Partly_Cloudy	95	10	50	BLACK_TOP	15	0.70	0.90	1.10	2.5	3.2	4.0	1.6	2.0	2.5
Partly_Cloudy	95	10	50	BLACK_TOP	20	0.55	0.70	0.90	2.0	2.5	3.2	1.2	1.6	2.0
Partly_Cloudy	95	10	50	BLACK_TOP	30	0.40	0.50	0.65	1.4	1.8	2.3	0.9	1.1	1.5
Partly_Cloudy	95	10	50	BLACK_TOP	40	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	95	10	50	BLACK_TOP	50	0.25	0.30	0.40	0.9	1.1	1.4	0.6	0.7	0.9
Partly_Cloudy	95	10	50	DIRT_ROAD	-50	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Partly_Cloudy	95	10	50	DIRT_ROAD	-40	0.95	1.15	1.40	3.4	4.1	5.0	2.1	2.6	3.1
Partly_Cloudy	95	10	50	DIRT_ROAD	-30	1.05	1.30	1.55	3.8	4.7	5.6	2.4	2.9	3.5
Partly_Cloudy	95	10	50	DIRT_ROAD	-20	1.25	1.50	1.70	4.5	5.4	6.1	2.8	3.4	3.8
Partly_Cloudy	95	10	50	DIRT_ROAD	-15	1.30	1.55	1.80	4.7	5.6	6.5	2.9	3.5	4.0
Partly_Cloudy	95	10	50	DIRT_ROAD	-10	1.40	1.65	1.90	5.0	5.9	6.8	3.1	3.7	4.3
Partly_Cloudy	95	10	50	DIRT_ROAD	-5	1.50	1.80	2.00	5.4	6.5	7.2	3.4	4.0	4.5
Partly_Cloudy	95	10	50	DIRT_ROAD	0	1.65	1.90	2.15	5.9	6.8	7.7	3.7	4.3	4.8
Partly_Cloudy	95	10	50	DIRT_ROAD	5	1.15	1.40	1.65	4.1	5.0	5.9	2.6	3.1	3.7
Partly_Cloudy	95	10	50	DIRT_ROAD	10	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Partly_Cloudy	95	10	50	DIRT_ROAD	15	0.65	0.80	1.00	2.3	2.9	3.6	1.5	1.8	2.2
Partly_Cloudy	95	10	50	DIRT_ROAD	20	0.50	0.65	0.80	1.8	2.3	2.9	1.1	1.5	1.8
Partly_Cloudy	95	10	50	DIRT_ROAD	30	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	95	10	50	DIRT_ROAD	40	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	95	10	50	DIRT_ROAD	50	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	95	10	50	LOOSE_SAND	-50	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Partly_Cloudy	95	10	50	LOOSE_SAND	-40	0.55	0.70	0.85	2.0	2.5	3.1	1.2	1.6	1.9
Partly_Cloudy	95	10	50	LOOSE_SAND	-30	0.65	0.85	1.00	2.3	3.1	3.6	1.5	1.9	2.2
Partly_Cloudy	95	10	50	LOOSE_SAND	-20	0.80	0.95	1.15	2.9	3.4	4.1	1.8	2.1	2.6
Partly_Cloudy	95	10	50	LOOSE_SAND	-15	0.85	1.05	1.25	3.1	3.8	4.5	1.9	2.4	2.8
Partly_Cloudy	95	10	50	LOOSE_SAND	-10	0.95	1.15	1.30	3.4	4.1	4.7	2.1	2.6	2.9
Partly_Cloudy	95	10	50	LOOSE_SAND	-5	1.05	1.25	1.45	3.8	4.5	5.2	2.4	2.8	3.2
Partly_Cloudy	95	10	50	LOOSE_SAND	0	1.15	1.35	1.55	4.1	4.9	5.6	2.6	3.0	3.5
Partly_Cloudy	95	10	50	LOOSE_SAND	5	0.70	0.90	1.05	2.5	3.2	3.8	1.6	2.0	2.4
Partly_Cloudy	95	10	50	LOOSE_SAND	10	0.50	0.60	0.75	1.8	2.2	2.7	1.1	1.3	1.7
Partly_Cloudy	95	10	50	LOOSE_SAND	15	0.35	0.45	0.55	1.3	1.6	2.0	0.8	1.0	1.2
Partly_Cloudy	95	10	50	LOOSE_SAND	20	0.25	0.35	0.45	0.9	1.3	1.6	0.6	0.8	1.0
Partly_Cloudy	95	10	50	LOOSE_SAND	30	0.15	0.25	0.30	0.5	0.9	1.1	0.3	0.6	0.7
Partly_Cloudy	95	10	50	LOOSE_SAND	40	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	95	10	50	LOOSE_SAND	50	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4

Table G-31. Maximum Sustainable Speed, Partly Cloudy, 95% Humidity, 15°C (59°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	95	15	59	BLACK_TOP	-50	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Partly_Cloudy	95	15	59	BLACK_TOP	-40	0.90	1.15	1.30	3.2	4.1	4.7	2.0	2.6	2.9
Partly_Cloudy	95	15	59	BLACK_TOP	-30	1.05	1.30	1.45	3.8	4.7	5.2	2.4	2.9	3.2
Partly_Cloudy	95	15	59	BLACK_TOP	-20	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Partly_Cloudy	95	15	59	BLACK_TOP	-15	1.30	1.55	1.70	4.7	5.6	6.1	2.9	3.5	3.8
Partly_Cloudy	95	15	59	BLACK_TOP	-10	1.40	1.65	1.80	5.0	5.9	6.5	3.1	3.7	4.0
Partly_Cloudy	95	15	59	BLACK_TOP	-5	1.50	1.75	1.90	5.4	6.3	6.8	3.4	3.9	4.3
Partly_Cloudy	95	15	59	BLACK_TOP	0	1.60	1.85	2.00	5.8	6.7	7.2	3.6	4.1	4.5
Partly_Cloudy	95	15	59	BLACK_TOP	5	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Partly_Cloudy	95	15	59	BLACK_TOP	10	0.80	1.00	1.15	2.9	3.6	4.1	1.8	2.2	2.6
Partly_Cloudy	95	15	59	BLACK_TOP	15	0.60	0.80	0.90	2.2	2.9	3.2	1.3	1.8	2.0
Partly_Cloudy	95	15	59	BLACK_TOP	20	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Partly_Cloudy	95	15	59	BLACK_TOP	30	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Partly_Cloudy	95	15	59	BLACK_TOP	40	0.25	0.35	0.40	0.9	1.3	1.4	0.6	0.8	0.9
Partly_Cloudy	95	15	59	BLACK_TOP	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	95	15	59	DIRT_ROAD	-50	0.75	0.95	1.05	2.7	3.4	3.8	1.7	2.1	2.4
Partly_Cloudy	95	15	59	DIRT_ROAD	-40	0.85	1.05	1.20	3.1	3.8	4.3	1.9	2.4	2.7
Partly_Cloudy	95	15	59	DIRT_ROAD	-30	0.95	1.20	1.35	3.4	4.3	4.9	2.1	2.7	3.0
Partly_Cloudy	95	15	59	DIRT_ROAD	-20	1.10	1.35	1.50	4.0	4.9	5.4	2.5	3.0	3.4
Partly_Cloudy	95	15	59	DIRT_ROAD	-15	1.20	1.45	1.60	4.3	5.2	5.8	2.7	3.2	3.6
Partly_Cloudy	95	15	59	DIRT_ROAD	-10	1.30	1.55	1.70	4.7	5.6	6.1	2.9	3.5	3.8
Partly_Cloudy	95	15	59	DIRT_ROAD	-5	1.40	1.65	1.80	5.0	5.9	6.5	3.1	3.7	4.0
Partly_Cloudy	95	15	59	DIRT_ROAD	0	1.50	1.75	1.90	5.4	6.3	6.8	3.4	3.9	4.3
Partly_Cloudy	95	15	59	DIRT_ROAD	5	1.05	1.30	1.40	3.8	4.7	5.0	2.4	2.9	3.1
Partly_Cloudy	95	15	59	DIRT_ROAD	10	0.75	0.95	1.05	2.7	3.4	3.8	1.7	2.1	2.4
Partly_Cloudy	95	15	59	DIRT_ROAD	15	0.55	0.75	0.85	2.0	2.7	3.1	1.2	1.7	1.9
Partly_Cloudy	95	15	59	DIRT_ROAD	20	0.45	0.60	0.70	1.6	2.2	2.5	1.0	1.3	1.6
Partly_Cloudy	95	15	59	DIRT_ROAD	30	0.30	0.40	0.50	1.1	1.4	1.8	0.7	0.9	1.1
Partly_Cloudy	95	15	59	DIRT_ROAD	40	0.20	0.30	0.35	0.7	1.1	1.3	0.4	0.7	0.8
Partly_Cloudy	95	15	59	DIRT_ROAD	50	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	95	15	59	LOOSE_SAND	-50	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Partly_Cloudy	95	15	59	LOOSE_SAND	-40	0.50	0.65	0.75	1.8	2.3	2.7	1.1	1.5	1.7
Partly_Cloudy	95	15	59	LOOSE_SAND	-30	0.60	0.75	0.85	2.2	2.7	3.1	1.3	1.7	1.9
Partly_Cloudy	95	15	59	LOOSE_SAND	-20	0.70	0.90	1.00	2.5	3.2	3.6	1.6	2.0	2.2
Partly_Cloudy	95	15	59	LOOSE_SAND	-15	0.80	0.95	1.05	2.9	3.4	3.8	1.8	2.1	2.4
Partly_Cloudy	95	15	59	LOOSE_SAND	-10	0.90	1.05	1.15	3.2	3.8	4.1	2.0	2.4	2.6
Partly_Cloudy	95	15	59	LOOSE_SAND	-5	1.00	1.15	1.25	3.6	4.1	4.5	2.2	2.6	2.8
Partly_Cloudy	95	15	59	LOOSE_SAND	0	1.10	1.25	1.40	4.0	4.5	5.0	2.5	2.8	3.1
Partly_Cloudy	95	15	59	LOOSE_SAND	5	0.65	0.80	0.90	2.3	2.9	3.2	1.5	1.8	2.0
Partly_Cloudy	95	15	59	LOOSE_SAND	10	0.40	0.55	0.65	1.4	2.0	2.3	0.9	1.2	1.5
Partly_Cloudy	95	15	59	LOOSE_SAND	15	0.30	0.40	0.45	1.1	1.4	1.6	0.7	0.9	1.0
Partly_Cloudy	95	15	59	LOOSE_SAND	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	95	15	59	LOOSE_SAND	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	95	15	59	LOOSE_SAND	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	95	15	59	LOOSE_SAND	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3

Table G-32. Maximum Sustainable Speed, Partly Cloudy, 95% Humidity, 20°C (68°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	95	20	68	BLACK_TOP	-50	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Partly_Cloudy	95	20	68	BLACK_TOP	-40	0.80	0.90	1.05	2.9	3.2	3.8	1.8	2.0	2.4
Partly_Cloudy	95	20	68	BLACK_TOP	-30	0.90	1.05	1.15	3.2	3.8	4.1	2.0	2.4	2.6
Partly_Cloudy	95	20	68	BLACK_TOP	-20	1.05	1.20	1.35	3.8	4.3	4.9	2.4	2.7	3.0
Partly_Cloudy	95	20	68	BLACK_TOP	-15	1.15	1.25	1.40	4.1	4.5	5.0	2.6	2.8	3.1
Partly_Cloudy	95	20	68	BLACK_TOP	-10	1.25	1.35	1.50	4.5	4.9	5.4	2.8	3.0	3.4
Partly_Cloudy	95	20	68	BLACK_TOP	-5	1.35	1.45	1.65	4.9	5.2	5.9	3.0	3.2	3.7
Partly_Cloudy	95	20	68	BLACK_TOP	0	1.45	1.60	1.75	5.2	5.8	6.3	3.2	3.6	3.9
Partly_Cloudy	95	20	68	BLACK_TOP	5	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Partly_Cloudy	95	20	68	BLACK_TOP	10	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Partly_Cloudy	95	20	68	BLACK_TOP	15	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Partly_Cloudy	95	20	68	BLACK_TOP	20	0.40	0.50	0.55	1.4	1.8	2.0	0.9	1.1	1.2
Partly_Cloudy	95	20	68	BLACK_TOP	30	0.30	0.35	0.40	1.1	1.3	1.4	0.7	0.8	0.9
Partly_Cloudy	95	20	68	BLACK_TOP	40	0.20	0.25	0.30	0.7	0.9	1.1	0.4	0.6	0.7
Partly_Cloudy	95	20	68	BLACK_TOP	50	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	95	20	68	DIRT_ROAD	-50	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Partly_Cloudy	95	20	68	DIRT_ROAD	-40	0.75	0.85	0.95	2.7	3.1	3.4	1.7	1.9	2.1
Partly_Cloudy	95	20	68	DIRT_ROAD	-30	0.85	0.95	1.10	3.1	3.4	4.0	1.9	2.1	2.5
Partly_Cloudy	95	20	68	DIRT_ROAD	-20	1.00	1.10	1.25	3.6	4.0	4.5	2.2	2.5	2.8
Partly_Cloudy	95	20	68	DIRT_ROAD	-15	1.10	1.20	1.35	4.0	4.3	4.9	2.5	2.7	3.0
Partly_Cloudy	95	20	68	DIRT_ROAD	-10	1.15	1.30	1.45	4.1	4.7	5.2	2.6	2.9	3.2
Partly_Cloudy	95	20	68	DIRT_ROAD	-5	1.30	1.40	1.55	4.7	5.0	5.6	2.9	3.1	3.5
Partly_Cloudy	95	20	68	DIRT_ROAD	0	1.40	1.50	1.65	5.0	5.4	5.9	3.1	3.4	3.7
Partly_Cloudy	95	20	68	DIRT_ROAD	5	0.90	1.05	1.15	3.2	3.8	4.1	2.0	2.4	2.6
Partly_Cloudy	95	20	68	DIRT_ROAD	10	0.65	0.75	0.85	2.3	2.7	3.1	1.5	1.7	1.9
Partly_Cloudy	95	20	68	DIRT_ROAD	15	0.45	0.55	0.65	1.6	2.0	2.3	1.0	1.2	1.5
Partly_Cloudy	95	20	68	DIRT_ROAD	20	0.35	0.45	0.50	1.3	1.6	1.8	0.8	1.0	1.1
Partly_Cloudy	95	20	68	DIRT_ROAD	30	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	95	20	68	DIRT_ROAD	40	0.20	0.20	0.25	0.7	0.7	0.9	0.4	0.4	0.6
Partly_Cloudy	95	20	68	DIRT_ROAD	50	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Partly_Cloudy	95	20	68	LOOSE_SAND	-50	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Partly_Cloudy	95	20	68	LOOSE_SAND	-40	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Partly_Cloudy	95	20	68	LOOSE_SAND	-30	0.50	0.60	0.70	1.8	2.2	2.5	1.1	1.3	1.6
Partly_Cloudy	95	20	68	LOOSE_SAND	-20	0.65	0.70	0.80	2.3	2.5	2.9	1.5	1.6	1.8
Partly_Cloudy	95	20	68	LOOSE_SAND	-15	0.70	0.80	0.90	2.5	2.9	3.2	1.6	1.8	2.0
Partly_Cloudy	95	20	68	LOOSE_SAND	-10	0.80	0.90	1.00	2.9	3.2	3.6	1.8	2.0	2.2
Partly_Cloudy	95	20	68	LOOSE_SAND	-5	0.90	1.00	1.10	3.2	3.6	4.0	2.0	2.2	2.5
Partly_Cloudy	95	20	68	LOOSE_SAND	0	1.00	1.10	1.20	3.6	4.0	4.3	2.2	2.5	2.7
Partly_Cloudy	95	20	68	LOOSE_SAND	5	0.55	0.65	0.75	2.0	2.3	2.7	1.2	1.5	1.7
Partly_Cloudy	95	20	68	LOOSE_SAND	10	0.35	0.40	0.50	1.3	1.4	1.8	0.8	0.9	1.1
Partly_Cloudy	95	20	68	LOOSE_SAND	15	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	95	20	68	LOOSE_SAND	20	0.20	0.25	0.25	0.7	0.9	0.9	0.4	0.6	0.6
Partly_Cloudy	95	20	68	LOOSE_SAND	30	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	95	20	68	LOOSE_SAND	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	95	20	68	LOOSE_SAND	50	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2

Table G-33. Maximum Sustainable Speed, Partly Cloudy, 95% Humidity, 25°C (77°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	95	25	77	BLACK_TOP	-50	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Partly_Cloudy	95	25	77	BLACK_TOP	-40	0.55	0.60	0.75	2.0	2.2	2.7	1.2	1.3	1.7
Partly_Cloudy	95	25	77	BLACK_TOP	-30	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Partly_Cloudy	95	25	77	BLACK_TOP	-20	0.75	0.85	1.00	2.7	3.1	3.6	1.7	1.9	2.2
Partly_Cloudy	95	25	77	BLACK_TOP	-15	0.85	0.90	1.10	3.1	3.2	4.0	1.9	2.0	2.5
Partly_Cloudy	95	25	77	BLACK_TOP	-10	0.95	1.00	1.15	3.4	3.6	4.1	2.1	2.2	2.6
Partly_Cloudy	95	25	77	BLACK_TOP	-5	1.05	1.10	1.25	3.8	4.0	4.5	2.4	2.5	2.8
Partly_Cloudy	95	25	77	BLACK_TOP	0	1.15	1.20	1.40	4.1	4.3	5.0	2.6	2.7	3.1
Partly_Cloudy	95	25	77	BLACK_TOP	5	0.70	0.75	0.90	2.5	2.7	3.2	1.6	1.7	2.0
Partly_Cloudy	95	25	77	BLACK_TOP	10	0.45	0.50	0.65	1.6	1.8	2.3	1.0	1.1	1.5
Partly_Cloudy	95	25	77	BLACK_TOP	15	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Partly_Cloudy	95	25	77	BLACK_TOP	20	0.25	0.30	0.35	0.9	1.1	1.3	0.6	0.7	0.8
Partly_Cloudy	95	25	77	BLACK_TOP	30	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	95	25	77	BLACK_TOP	40	0.10	0.15	0.20	0.4	0.5	0.7	0.2	0.3	0.4
Partly_Cloudy	95	25	77	BLACK_TOP	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	95	25	77	DIRT_ROAD	-50	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	95	25	77	DIRT_ROAD	-40	0.50	0.55	0.70	1.8	2.0	2.5	1.1	1.2	1.6
Partly_Cloudy	95	25	77	DIRT_ROAD	-30	0.60	0.65	0.80	2.2	2.3	2.9	1.3	1.5	1.8
Partly_Cloudy	95	25	77	DIRT_ROAD	-20	0.70	0.80	0.95	2.5	2.9	3.4	1.6	1.8	2.1
Partly_Cloudy	95	25	77	DIRT_ROAD	-15	0.80	0.85	1.00	2.9	3.1	3.6	1.8	1.9	2.2
Partly_Cloudy	95	25	77	DIRT_ROAD	-10	0.90	0.95	1.10	3.2	3.4	4.0	2.0	2.1	2.5
Partly_Cloudy	95	25	77	DIRT_ROAD	-5	1.00	1.05	1.20	3.6	3.8	4.3	2.2	2.4	2.7
Partly_Cloudy	95	25	77	DIRT_ROAD	0	1.10	1.15	1.30	4.0	4.1	4.7	2.5	2.6	2.9
Partly_Cloudy	95	25	77	DIRT_ROAD	5	0.65	0.70	0.85	2.3	2.5	3.1	1.5	1.6	1.9
Partly_Cloudy	95	25	77	DIRT_ROAD	10	0.40	0.50	0.60	1.4	1.8	2.2	0.9	1.1	1.3
Partly_Cloudy	95	25	77	DIRT_ROAD	15	0.30	0.35	0.45	1.1	1.3	1.6	0.7	0.8	1.0
Partly_Cloudy	95	25	77	DIRT_ROAD	20	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Partly_Cloudy	95	25	77	DIRT_ROAD	30	0.15	0.15	0.20	0.5	0.5	0.7	0.3	0.3	0.4
Partly_Cloudy	95	25	77	DIRT_ROAD	40	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	95	25	77	DIRT_ROAD	50	0.10	0.10	0.15	0.4	0.4	0.5	0.2	0.2	0.3
Partly_Cloudy	95	25	77	LOOSE_SAND	-50	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Partly_Cloudy	95	25	77	LOOSE_SAND	-40	0.30	0.30	0.40	1.1	1.1	1.4	0.7	0.7	0.9
Partly_Cloudy	95	25	77	LOOSE_SAND	-30	0.35	0.40	0.45	1.3	1.4	1.6	0.8	0.9	1.0
Partly_Cloudy	95	25	77	LOOSE_SAND	-20	0.45	0.50	0.60	1.6	1.8	2.2	1.0	1.1	1.3
Partly_Cloudy	95	25	77	LOOSE_SAND	-15	0.50	0.55	0.65	1.8	2.0	2.3	1.1	1.2	1.5
Partly_Cloudy	95	25	77	LOOSE_SAND	-10	0.60	0.65	0.75	2.2	2.3	2.7	1.3	1.5	1.7
Partly_Cloudy	95	25	77	LOOSE_SAND	-5	0.70	0.75	0.85	2.5	2.7	3.1	1.6	1.7	1.9
Partly_Cloudy	95	25	77	LOOSE_SAND	0	0.80	0.85	0.95	2.9	3.1	3.4	1.8	1.9	2.1
Partly_Cloudy	95	25	77	LOOSE_SAND	5	0.40	0.45	0.55	1.4	1.6	2.0	0.9	1.0	1.2
Partly_Cloudy	95	25	77	LOOSE_SAND	10	0.25	0.25	0.35	0.9	0.9	1.3	0.6	0.6	0.8
Partly_Cloudy	95	25	77	LOOSE_SAND	15	0.15	0.20	0.25	0.5	0.7	0.9	0.3	0.4	0.6
Partly_Cloudy	95	25	77	LOOSE_SAND	20	0.10	0.15	0.15	0.4	0.5	0.5	0.2	0.3	0.3
Partly_Cloudy	95	25	77	LOOSE_SAND	30	0.05	0.10	0.10	0.2	0.4	0.4	0.1	0.2	0.2
Partly_Cloudy	95	25	77	LOOSE_SAND	40	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	95	25	77	LOOSE_SAND	50	0.05	0.05	0.05	0.2	0.2	0.2	0.1	0.1	0.1

Table G-34. Maximum Sustainable Speed, Partly Cloudy, 95% Humidity, 30°C (86°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	95	30	86	BLACK_TOP	-50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	95	30	86	BLACK_TOP	-40	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Partly_Cloudy	95	30	86	BLACK_TOP	-30	0.15	0.25	0.40	0.5	0.9	1.4	0.3	0.6	0.9
Partly_Cloudy	95	30	86	BLACK_TOP	-20	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	95	30	86	BLACK_TOP	-15	0.30	0.40	0.60	1.1	1.4	2.2	0.7	0.9	1.3
Partly_Cloudy	95	30	86	BLACK_TOP	-10	0.35	0.45	0.65	1.3	1.6	2.3	0.8	1.0	1.5
Partly_Cloudy	95	30	86	BLACK_TOP	-5	0.45	0.55	0.75	1.6	2.0	2.7	1.0	1.2	1.7
Partly_Cloudy	95	30	86	BLACK_TOP	0	0.55	0.65	0.85	2.0	2.3	3.1	1.2	1.5	1.9
Partly_Cloudy	95	30	86	BLACK_TOP	5	0.20	0.30	0.45	0.7	1.1	1.6	0.4	0.7	1.0
Partly_Cloudy	95	30	86	BLACK_TOP	10	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	95	30	86	BLACK_TOP	15	0.05	0.10	0.20	0.2	0.4	0.7	0.1	0.2	0.4
Partly_Cloudy	95	30	86	BLACK_TOP	20	0.05	0.05	0.15	0.2	0.2	0.5	0.1	0.1	0.3
Partly_Cloudy	95	30	86	BLACK_TOP	30	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Partly_Cloudy	95	30	86	BLACK_TOP	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	95	30	86	BLACK_TOP	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	95	30	86	DIRT_ROAD	-50	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	95	30	86	DIRT_ROAD	-40	0.10	0.15	0.30	0.4	0.5	1.1	0.2	0.3	0.7
Partly_Cloudy	95	30	86	DIRT_ROAD	-30	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Partly_Cloudy	95	30	86	DIRT_ROAD	-20	0.20	0.30	0.50	0.7	1.1	1.8	0.4	0.7	1.1
Partly_Cloudy	95	30	86	DIRT_ROAD	-15	0.25	0.35	0.55	0.9	1.3	2.0	0.6	0.8	1.2
Partly_Cloudy	95	30	86	DIRT_ROAD	-10	0.35	0.40	0.60	1.3	1.4	2.2	0.8	0.9	1.3
Partly_Cloudy	95	30	86	DIRT_ROAD	-5	0.40	0.50	0.70	1.4	1.8	2.5	0.9	1.1	1.6
Partly_Cloudy	95	30	86	DIRT_ROAD	0	0.50	0.60	0.80	1.8	2.2	2.9	1.1	1.3	1.8
Partly_Cloudy	95	30	86	DIRT_ROAD	5	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	95	30	86	DIRT_ROAD	10	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	95	30	86	DIRT_ROAD	15	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	95	30	86	DIRT_ROAD	20	0.05	0.05	0.10	0.2	0.2	0.4	0.1	0.1	0.2
Partly_Cloudy	95	30	86	DIRT_ROAD	30	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Partly_Cloudy	95	30	86	DIRT_ROAD	40	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	95	30	86	DIRT_ROAD	50	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	95	30	86	LOOSE_SAND	-50	0.05	0.05	0.15	0.2	0.2	0.5	0.1	0.1	0.3
Partly_Cloudy	95	30	86	LOOSE_SAND	-40	0.05	0.10	0.15	0.2	0.4	0.5	0.1	0.2	0.3
Partly_Cloudy	95	30	86	LOOSE_SAND	-30	0.10	0.10	0.20	0.4	0.4	0.7	0.2	0.2	0.4
Partly_Cloudy	95	30	86	LOOSE_SAND	-20	0.10	0.15	0.30	0.4	0.5	1.1	0.2	0.3	0.7
Partly_Cloudy	95	30	86	LOOSE_SAND	-15	0.15	0.20	0.35	0.5	0.7	1.3	0.3	0.4	0.8
Partly_Cloudy	95	30	86	LOOSE_SAND	-10	0.20	0.25	0.40	0.7	0.9	1.4	0.4	0.6	0.9
Partly_Cloudy	95	30	86	LOOSE_SAND	-5	0.25	0.35	0.50	0.9	1.3	1.8	0.6	0.8	1.1
Partly_Cloudy	95	30	86	LOOSE_SAND	0	0.35	0.45	0.60	1.3	1.6	2.2	0.8	1.0	1.3
Partly_Cloudy	95	30	86	LOOSE_SAND	5	0.10	0.15	0.25	0.4	0.5	0.9	0.2	0.3	0.6
Partly_Cloudy	95	30	86	LOOSE_SAND	10	0.05	0.05	0.15	0.2	0.2	0.5	0.1	0.1	0.3
Partly_Cloudy	95	30	86	LOOSE_SAND	15	0.00	0.05	0.10	0.0	0.2	0.4	0.0	0.1	0.2
Partly_Cloudy	95	30	86	LOOSE_SAND	20	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	95	30	86	LOOSE_SAND	30	0.00	0.00	0.05	0.0	0.0	0.2	0.0	0.0	0.1
Partly_Cloudy	95	30	86	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	30	86	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

Table G-35. Maximum Sustainable Speed, Partly Cloudy, 95% Humidity, 35°C (95°F)

Cloud Cover	RH (%)	°C	°F	Terrain Type	Grade (%)	Max Sustainable Speed (meters/second)			Max Sustainable Speed (kilometers/hour)			Max Sustainable Speed (miles/hour)		
						Risk Level			Risk Level			Risk Level		
						Low	Mod	High	Low	Mod	High	Low	Mod	High
Partly_Cloudy	95	35	95	BLACK_TOP	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	BLACK_TOP	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	DIRT_ROAD	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	-50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	-40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	-30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	-20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	-15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	-10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	-5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	5	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	10	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	15	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	20	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	30	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	40	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Partly_Cloudy	95	35	95	LOOSE_SAND	50	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0

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